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OPEN SESSION
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       UNITED STATES COPYRIGHT ROYALTY JUDGES
                                                        1 APPEARANCES (Continued):
 1
                                                               Counsel for Pandora Media, Inc.:
 2
              The Library of Congress
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 3
   _______
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                                                                        PETER D. ISAKOFF, ESQ.
   IN THE MATTER OF:
                                                        4
                                                                        Weil Gotshal & Manges, LLP
                                                        5
                                                                        1900 Eye Street, N.W.
 6 DETERMINATION OF RATES ) Docket No.
                                                        6
                                                                        Suite 900
 7 AND TERMS FOR MAKING AND ) 16-CRB-0003-PR
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                                                                        Washington, D.C. 20005
   DISTRIBUTING PHONORECORDS) (2018-2022)
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                                                                        202-882-7155
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9
   (PHONORECORDS III),
                                                       10
   ____X
                                                                      BENJAMIN E. MARKS, ESO.
11 BEFORE: THE HONORABLE SUZANNE BARNETT
                                                       11
                                                                      JENNIFER RAMOS, ESQ.
                                                       12
                                                                      JACOB B. EBIN, ESQ.
12
             THE HONORABLE JESSE M. FEDER
13
              THE HONORABLE DAVID R. STRICKLER
                                                       13
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16
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                                                                      212-310-8029
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              101 Independence Avenue, S.E.
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                   Washington, D.C.
                                                       19
                                                                      HONG-AN TRAN, ESQ.
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                                                                      Weil, Gotshal & Manges LLP
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                   March 13, 2017
                                                                      201 Redwood Shores Parkway
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                      9:05 a.m.
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                                                                      Redwood Shores, CA 94065
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                     VOLUME III
                                                                      650-802-3000
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24 Reported by:
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                                                    529
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 2 Counsel for National Music Publishers Association,
                                                               Counsel for Spotify USA, Inc.:
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23 but if there's a two-hour delay, it might mean just

24 that, a two-hour delay for all of us, including 25 those of your staff who come in quite early. They

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OPEN SESSION
                                                    532
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1 APPEARANCES (Continued):
                                                         1 would have to delay maybe more than two hours | I
       Counsel for Amazon Prime Music:
                                                         2 | don't know at this point.
3
              MICHAEL S. ELKIN, ESQ.
                                                         4
               THOMAS PATRICK LANE, ESQ.
                                                         4 answers. By the end of the day, we should have for
5
              DANIEL N. GUISBOND, ESQ.
                                                         5 all of you a sheet of paper that has web sites and
 6
              STACEY FOLTZ STARK, ESO.
                                                         6 apps and phone numbers to check. I have found that
7
                                                         7 the Library of Congress web site has been reliable,
               Winston & Strawn, LLP
8
               200 Park Avenue
                                                         8 but there might be something that's more immediate,
9
              New York, New York 10166
                                                         9 and we'll be sure that we include every possible
10
               212-294-6700
                                                        10 source. The news media are usually pretty good as
                                                        11 well.
11
12
       Counsel for Google, Inc.:
                                                        12 ' The other thing that we need to deal with
13
               KENNETH STEINTHAL, ESQ.
                                                        13 this morning is the motion to exclude conversion :
14
               JOSEPH WETZEL, ESQ.
                                                        14 testimony. We know that that's part of Professor,
               DAVID P. MATTERN, ESQ.
15
                                                        15 Dr. Katz's testimony! And we have reviewed the
                                                        16 papers on that motion and have determined that the
16
               KATHERINE E. MERK, ESQ.
17
               King & Spalding, LLP
                                                        17 testimony can be allowed in.
18
              101 Second Street
                                                        18 The conversion factor is something that
19
               Suite 2300
                                                        19 is relied upon by experts in the field. The fact:
20
               San Francisco, CA 94105
                                                        20 that the sources of that -- of those factors are
21
                                                        21 nebulous would go to the weight, rather than to the
               415-318-1211
22
                                                        22 admissibility, because it is generally relied upon,
23
                                                        23 generally used in the industry and by other experts
24
                                                        24 in the industry. So we will allow it and weigh it
                                                        25 accordingly.
                                                                                                             535
                                                                     Any other preliminary matters?
1
                  PROCEEDINGS
                                                                      MR. MANCINI: Yes, Your Honor.
                                           (9:05 \text{ a.m.})
                                                         3 John Mancini, for Spotify USA, Inc. We have a
              JUDGE BARNETT: We have some preliminary
                                                         4 related issue with respect to tomorrow's pending
 4 matters to deal with this morning. Snowmaggedon for
 5 starters.
                                                         5 storm. Mr. McCarthy is scheduled to testify
              I think from Boston as far south as
                                                         6 tomorrow. He's in New York and has a board meeting
7 Philadelphia, the storm is real. As far as D.C. is
                                                         7 the following day, so he needs to arrange his
8 concerned, the jury is still out. We definitely
                                                         8 schedule accordingly. We've reached an agreement
9 will get some snow. We don't know how much. And
                                                         9 with Copyright Owners that he could be rescheduled
10 even the forecasters keep saying things like the
                                                        10 to Tuesday, the 21st, which seems to fit with the
11 forecast is fluid, which means we might get a lot
                                                        11 schedule for everyone, with the Court's permission.
12 and we might get none and we might get some sleet.
                                                                      JUDGE BARNETT: Tuesday the 21st of --
                                                        12
                                                                      MR. MANCINI: March, a week from --
13 We don't know.
                                                        13
14.
              If we get what New Yorkers would call a
                                                        14 extended by one week.
15 dusting, it is also likely that the government will
                                                        15
                                                                      JUDGE BARNETT: Oh, okay, fine. I'm
16 shut down. If there is a shutdown, this building is
                                                        16 sorry, I was thinking ahead to the satellite case,
17 closed and we cannot have access to it. If there's
                                                        17 which comes right on the heels of this one.
18 a circumstance of employees may take liberal leave
                                                        18 MR. MANCINI: Right. But he'll -- he
19 or unscheduled leave, that sort of fudge language,
                                                        19 goes from March 14th to March 21st.
20 then the building will be open. And we all hope
                                                        20 : : : JUDGE BARNETT: Okay. Thank you.
                                                        21 MR. MANCINI: Thank you.
21 that we can get in and we will be here.
22
              If there's a delay, we don't know yet,
                                                        22 July JUDGE STRICKLER: A question. Assuming
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25 might appear?

23 we go forward, then, tomorrow despite the weather, 24 does that change our lineup for tomorrow as to who

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MR. MANCINI: It does. There's one last
   witness, which might allow us some accommodation,
 3
    depending on the weather.
 4
              MR. MARKS: Yeah, what -- what I'd like
   to do is that since we would have at most one
  witness tomorrow, that maybe we could all agree to
    start late so that we would have sometime in the
 7
   morning to find out whether or not the building is
 8
    even open, and that if this turns out to be a
    non-event, we would just all come in at whatever it
    is, 11:00 or noon, since we won't have a full day
    anyway, but that would avoid uncertainty first thing
    in the morning.
13
              JUDGE BARNETT: Let us discuss that, and
14
15
   we'll get back to you right after the break.
              JUDGE STRICKLER: And just following up
16
17
   on my question about scheduling, so we would have
   Mr. Joyce tomorrow, not Mr. McCarthy; Mr. Herring,
   Mr. Harteau? Is that the schedule? And would we
    get to Mr. -- Dr. Leonard or -- or no, in any event,
   tomorrow? I guess that's a question for --
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1 expert testimony more generally. The first is that
   the parties have conferred and have agreed that
   while there should still be sequestration of fact
   witnesses, that the parties think it makes sense to
   not have sequestration of expert witnesses so that
    expert witnesses can read trial transcripts. And
    we'd request the Court's permission to that.
               JUDGE BARNETT: There's agreement?
 8
               MR. JANOWITZ: In that -- in that regard,
 9
   Your Honor, I would like to present Dr. Jeffrey
10
   Eisenach, who is one of our experts who is sitting
11
12
   next to me.
13
               JUDGE BARNETT: It has been my experience
14
   that experts can -- because they have to rebut the
   other expert testimony, can -- can hear it. But no
   one had asked for sequestration of fact witnesses,
```

MR. MARKS: One other issue we wanted to -- we wanted to request the judges' guidance, the 19 20 -- obviously, experts haven't had a chance to 21 respond to criticisms made by the other side's experts in their rebuttal testimony. Past practice 23 has always -- has been -- I won't say always -- has 24 been to allow some amount of issue joinder or allow

but that's appropriate, I think, in most cases.

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18

25 for some response.

JUDGE STRICKLER: Okay. Thank you. So is there any chance we're getting to Mr. --Dr. Leonard tomorrow?

respect to Mr. Harteau, he was part of an agreement

24 with the Copyright Owners, so he is no longer

25 presenting live testimony.

5

MR. MANCINI: One thing, Your Honor, with

MR. STEINTHAL: Dr. Leonard won't be here tomorrow. He was scheduled to be on Wednesday. Mr. Joyce is here. And, frankly, we're hoping we get him on today so that he can get out of town while --

9 JUDGE BARNETT: While the getting is 10 good.

MR. STEINTHAL: Exactly. So tomorrow I 11 12 think with -- because everybody had thought Mr. McCarthy would be testifying, but we totally understand all the circumstances. We're going to have just -- if we don't finish Mr. Joyce today, which we hope we will, he would follow tomorrow. 16 17 And then Mr. Herring. And that's the end of the day tomorrow. And then Dr. Leonard will be on the stand 19 first thing on Wednesday.

JUDGE BARNETT: Thank you. I will 20 21 consult with my colleagues, but it's beginning to sound like maybe a late start tomorrow would be good for everyone. Mr. Marks?

MR. MARKS: I want to just also address 24 25 just two other preliminary matters relating to

And -- and we've conferred and agreed 1 that while it's not appropriate to do extra rounds of expert reports and the like, some -- there ought to be some leeway to respond to a criticism of -- or an expert's direct testimony that's made in the other side's written rebuttal testimony. I think there's a difference of view as to when the appropriate time to do that would be. I think our view would be that that's properly part of the 10 rebuttal presentation of our experts, rather than 11 addressing testimony of experts who haven't yet appeared. And I think the Copyright Owners, they have a different view; they think it makes more 13 sense to do now. And we wanted Your Honors' 14 15 quidance. 16

MR. SEMEL: Thank you, Ben. Yes, we have discussed it. I would say what we wanted to do was present it to Your Honors for guidance as to what extent you wanted experts talking about -- in a sense, what would be almost like a surrebuttal, responding to the rebuttal testimony. But we do feel strongly that, to the

22 23 extent that Your Honors do wish that, that it should 24 come as part of the direct phase of the case; in other words, so, for example, Dr. Katz today, if he

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20

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1 wants to respond to a rebuttal comment about his 2 direct testimony, which is happening today, that he 3 would do that today. Otherwise, if it gets saved to 4 his rebuttal testimony, then his rebuttal testimony 5 becomes not only his rebuttal testimony but a 6 revisiting of his direct testimony after the 7 rebuttal testimony, which in essence gives their 8 side the last word after our side, gives them really 9 a surrebuttal.

This is almost like a pre-rebuttal, but 11 to allow them to do it during their rebuttal case 12 would truly be in our -- in the surrebuttal. But we 13 wanted your guidance just because we don't really 14 know what extent you would want that.

15

14

16

18

JUDGE BARNETT: And you think we do? 16 Well -- do you have a guestion for me? I think we 17 need to talk about it. I have a gut reaction, but, 18 you know, I have these two guys to deal with. I try 19 not to go on my gut most times. So we will --20 that's another thing we'll talk about and let you 21 know at the break -- after the break.

22 MR. SEMEL: I'm anticipating Mr. Marks' 23 concern is that Dr. Katz would be going on right 24 now, so it might be something he would want to do 25 right now.

1 Owners, the witnesses should address any rebuttal

2 criticism at the time they give their direct --

3 direct testimony. And in order for them to do that,

4 we need the attorney, the examiner, to ask with

specificity which -- what statement in the rebuttal

you're addressing and how the witness would respond to that.

In the unlikely event that during the

rebuttal testimony, something new or more detailed 10 comes out than was anticipated, then the original witness could address that additional material in his or her rebuttal.

It's -- it's a fine line. We'll try to walk it.

15 JUDGE STRICKLER: Just by way of example to make it clear on that -- on that last point, which is rebuttal and which is surrebuttal, if, for example, taking Dr. Katz as the direct witness, if on the stand Dr. Eisenach perhaps makes a statement

or a comment or a criticism that is not clearly already in his rebuttal, then Dr. Katz would have

the opportunity to return. And, of course, this is

just by way of example. Each witness would have the

opportunity. Each expert witness would have the 25 opportunity to return to respond to something that

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13

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JUDGE BARNETT: Well, Dr. Katz has got more than an hour of testimony, right? 3 MR. MARKS: Not much more than an hour of 4 direct testimony. 5

JUDGE BARNETT: Okay. Then we'll take a 6 break and talk. Let me -- you mentioned 7 transcripts, and before it leaves my mind, you have 8 ordered daily transcripts and our current contract 9 does not provide for us to have daily transcripts. 10 So if you're going to be referring to transcripts in 11 your questioning, it would be very helpful if you 12 could provide us with a copy of any testimony that 13 you're investigating.

Okay? So we'll -- we'll discuss this and 15 be right back.

(A recess was taken at 9:16 a.m., after 17 which the hearing resumed at 9:21 a.m.)

JUDGE BARNETT: Please be seated. Our 19 discussion began with the odd circumstance of having 20 written direct testimony followed by direct 21 examination on that written document, but we'll go 22 there some other day.

23 The question before us is how to address 24 criticisms in rebuttal testimony. We have 25 concluded, to go with Mr. Semel on the Copyright

1 was said in the rebuttal testimony by way of 2 criticism that wasn't specifically contained --3 perhaps it went to a more granular level -- in the oral testimony, and for some reason it was allowed to proceed -- the witness was allowed to proceed in that regard. JUDGE BARNETT: Clear as mud, right?

MR. SEMEL: Thank you. 9

MR. MARKS: Thank you. 10 JUDGE BARNETT: Mr. Marks?

MR. MARKS: I think -- we're prepared,

and we're calling Dr. Michael Katz. Whereupon--

MICHAEL L. KATZ,

14 15 having been first duly sworn, was examined and 16 testified as follows:

JUDGE BARNETT: Please be seated. 18 | MR. JANOWITZ: Your Honors, Jim Janowitz 19 for the Copyright Owners. I have one matter that I want to bring up, as Mr. Marks is standing at the

21 lectern, which is the slides that we received last 22 night of demonstratives in support of Dr. Katz's 23 testimony.

24 | Welobject to many of these because we 25 don't think these are demonstratives. What these

	OPEN SESSION			
	544			546
	1 in a sullaborate his tractionary during	1	Q. When did you join the faculty at	
1		1	Q. When did you join the faculty at Berkeley?	
2	from his direct statement and, in in fact, really	2		
3	serves as an indirect way of leading the witness.	3		
4	So he wouldn't be testifying; he's going to be	4	Q. Would you please briefly describe your	
5	giving prompts of his testimony as we're going	5	educational background?	
6	along, which we don't think is appropriate.	6	A. So I have an undergraduate degree in	
7	Dr. Katz, of course, will have his	7	economics from Harvard, and then I have a doctorate	
8	written direct statement available to him so he can	8	degree from Oxford University, also in economics.	
9	refer to it, you know, but I think the idea is that	9	Q. And what areas of economics do you	
10	he's supposed to be a direct witness and not led.	10	specialize in?	
11	And that is our objection.	11	A. Generally in industrial organization,	1
12	JUDGE BARNETT: Thank you. Mr. Marks?	12	antitrust, and regulation. And I've also done work	
13	MR. MARKS: The slides that we've	13	specifically on network effects and on intellectual	
14	prepared and we're happy to provide copies to you	14	property.	
15	now are absolutely in keeping with the types of	15	Q. Have you published dozens of	
16	slides that experts have used in past proceedings.	16	peer-reviewed articles in your fields of expertise?	
17	They are just simply to elicit the comments from	17	A. Yes, I have.	
18	Mr. Katz on the points in his report. They're for	18	Q. And have you written a microeconomics	
19	further commentary, and they're absolutely all	19	textbook?	
20	contained in his report as well. I think this is	20	A. Yes, with a co-author, I have.	
21	going to make it a much less efficient examination,	21	Q. Have you ever worked in the public	
22	if anything.	22	sector?	
23	JUDGE STRICKLER: You said you would	23	A. Yes. I worked in the Federal	
24	provide them to us if necessary. Don't we already	24	Communications Commission. On the Federal	
25	have them?	25	Communications Commission, I was the chief	
-	5.4.5	1		547
	545	5		547
1			economist. And then I also was the equivalent of	547
1 2	MR. MARKS: They are in the binder, yeah.		economist. And then I also was the equivalent of	547
2	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you.		the chief economist but called the deputy assistant	547
2 3	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going		the chief economist but called the deputy assistant attorney general for economic analysis in the	547
2 3 4	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this.	1 2 3 4	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of	547
2 3 4 5	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this. MR. JANOWITZ: Thank you.	1 2 3 4 5	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of Justice.	547
2 3 4 5 6	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this. MR. JANOWITZ: Thank you. JUDGE BARNETT: All the audiovisual aids	1 2 3 4 5 6	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of Justice. Q. And have you provided expert testimony	547
2 3 4 5 6 7	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this. MR. JANOWITZ: Thank you. JUDGE BARNETT: All the audiovisual aids for everyone. Mr. Marks?	1 2 3 4 5 6 7	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of Justice. Q. And have you provided expert testimony before?	547
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2 3 4 5 6 7 8 9 10	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this. MR. JANOWITZ: Thank you. JUDGE BARNETT: All the audiovisual aids for everyone. Mr. Marks? JUDGE STRICKLER: But just to be clear, the slides, you're not offering them in evidence? MR. MARKS: No. They're they're just simply as guideposts for Mr for Dr. Katz to	1 2 3 4 5 6 7 8 9 10	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of Justice. Q. And have you provided expert testimony before? A. Yes, I have. Q. In what kinds of settings? A. In state court, federal court, state regulatory proceedings, and also before the U.S.	547
2 3 4 5 6 7 8 9 10 11 12	MR. MARKS: They are in the binder, yeah. JUDGE STRICKLER: Thank you. JUDGE BARNETT: Overruled. We're going to allow this. MR. JANOWITZ: Thank you. JUDGE BARNETT: All the audiovisual aids for everyone. Mr. Marks? JUDGE STRICKLER: But just to be clear, the slides, you're not offering them in evidence? MR. MARKS: No. They're they're just simply as guideposts for Mr for Dr. Katz to comment on as part of his direct testimony.	1 2 3 4 5 6 7 8 9 10 11 12	the chief economist but called the deputy assistant attorney general for economic analysis in the Antitrust Division of the U.S. Department of Justice. Q. And have you provided expert testimony before? A. Yes, I have. Q. In what kinds of settings? A. In state court, federal court, state regulatory proceedings, and also before the U.S. Congress.	547
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Q. I have placed before you what has been 2 marked for identification as Pandora Exhibit 885. 3 Do you recognize this document? A. Yes, I do. 4 5 0. What is it? 6 Δ It's the written direct testimony that I filed in this matter. If I could ask you to please turn to the 8 last page before the appendices. 9 10 A. Yes. Q. Is that your signature? 11 12 A. Yes, it is. 13 Q. And if I could direct your attention back 14 to paragraph 2 of the document. 15 Α. Yes. Do the first two sentences reflect what 16 17 your employment relationship with Berkeley was at 18 the time of your written direct? 19 A. At the time of my written direct, I was 20 still employed and had not yet gone emeritus. 21 MR. MARKS: We offer Exhibit 885 into 22 evidence. 23 MR. JANOWITZ: No objection. 24 JUDGE BARNETT: 885 is admitted. 25 (Pandora Exhibit Number 885 was marked

THE WITNESS: Certainly -- I mean, I think there's a broad sense of what reasonable means but, I mean, it's really focused -- focused really on the four objectives as a key part of it. I mean, I think in looking at those objectives, I also took a pretty expansive view, so it incorporates a lot of things into reasonableness, but I didn't -- yeah, I haven't offered a separate opinion on reasonableness otherwise, although maybe, I guess, as an economist, probably always have in my : mind that efficiency is a good thing, things like that, but I, as much as I could, tried to tie it to the 801(b) objectives. 14 JUDGE STRICKLER: Thank you. 15 BY MR. MARKS: 16

Q. And, Dr. Katz, have you prepared a set! of! slides to assist in going through your testimony this morning?

A. Yes, as we've discussed.

20 Q. If we could turn to the second slide, please.

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22 Dr. Katz, can you just briefly summarize for the judges the conclusions that you have reached as part of your written direct testimony?

A. Yes. And as it shows here, I mean, the

1 and received into evidence.) 2 BY MR. MARKS:

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Q. Dr. Katz, what was the nature of the 4 assignment that you were given?

A. So I was asked to assess from the 6 perspective of economics or interpret from the 7 perspective of economics the 801(b)(1) objectives, 8 and then with those objectives in mind and the 9 economic interpretation of those objectives, 10 determine what would constitute reasonable rate 11 levels and rate structure for the interactive 12 service royalties that are at issue in this 13 proceeding.

And what do you mean when you use the 15 word "reasonable" in the context of this rate 16 proceeding?

A. So the reasonable is then, the way I 18 interpret it as an economist, what the 801(b)(1) 19 objectives call for.

Q. Have you prepared --JUDGE STRICKLER: Excuse me, I have a 22 question. Are you saying that you don't -- you 23 don't think there's any content to the phrase 24 "reasonable terms and conditions," other than what 25 we see in subsections A through D?

1 essential approach I took was to look at the 2012 2 settlement involving the same Services, and I 3 concluded there's a good benchmark, an excellent 4 benchmark, in fact. And in looking at that, I drew -- I guess, the major conclusions are really 6 that it's a -+ you can use largely as is, with one 7 modification. So I think that it's reasonable to 8 maintain, and I'll talk about the details more, to 9 maintain the fact that they're product-specific 10 headline rates, for the different products, and 11 those headline rates cover both the mechanical 12 royalties and the performance royalties. I think it's reasonable to maintain the product-specific minimums. And, again, those are minimums that apply to both the performance and the mechanical royalties. And then, as I'll no doubt explain, I think it's reasonable to remove the

and there aren't any floors in Subpart C. Now, the other thing is -- well, that's 21 my primary benchmark. I also looked at a couple of 22 others to see if they corroborated it or if they

18 mechanical-only floor, which applies to Subpart B,

contradicted it. And, in particular, I looked at: 24 direct deals between publisher, particularly

25 Pandora -- I'm sorry -- Services, particularly

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1 Pandora, and publishers, and I conclude that
2 supports the findings in terms of structure, and
3 then I looked at the proposed settlement, having to
  do with Subpart A, and concluded that that
  reinforces the conclusions regarding rate levels.
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Q. Professor Katz, before turning to your analysis of reasonable rate levels and structure, I'd like to begin with your assessment of the 801(b) objectives.

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Can you walk us through your economic interpretation of each objective, starting with the first objective of maximizing availability?

A. Yes. So in terms of maximizing availability, I guess the central point is just if you're going to have musical works available to the public, you need to make sure that both sides have the right incentives or have incentives to participate, and so it means we need to make sure 18 19 that the writers and publishers are adequately compensated and also that the streaming services are adequately compensated. And a key part of that, I

think, as an economist, though, is it's not to say 23 that anyone is quaranteed an income; it's that you

24 have the opportunity to compete and to succeed, if 25 you're able to offer -- have a better offering than

JUDGE BARNETT: Excuse me. These slides are marked restricted. Are we in restricted territory here?

MR. MARKS: We're not in restricted territory. Thank you for calling that to my attention. There will be some restricted slides at the back. I think there's just a restrictive footer on the -- on the document itself because, at the back, there are some restricted slides. 9

If you like, we can prepare an alternate set that only marks the -- the specific pages that are restricted as restricted.

JUDGE BARNETT: Always we would like to have only the pages that are restricted to be marked 14 restricted, not just in this instance.

116 MR. MARKS: I apologize. And we'll --17 we'll prepare a replacement set.

JUDGE BARNETT: Thank you.

BY MR. MARKS:

So coming back to the -- the second Q. objective, affording a fair return and fair income, how -- how do you as an economist think about that objective?

A. So, you know, economics generally, I 25 mean, thinks about fairness a lot of different ways,

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1 either a rival service, if you're a service, or than 2 other songwriters or publishers, if you're on that side.

Q. Are the prices charged to consumers relevant as an economic matter to the objective of maximizing availability?

Yes, because, if you think about it, if you said, for example, say, look, there are millions of songs available, anyone who wants can listen to a 10 song, as long as you're willing to pay a thousand 11 dollars every time you listen to the song, then 12 clearly, I think we'd all agree, that's not really 13 meaningful availability.

What it means to be available is that 15 consumers can get access at prices that they're willing to pay. And so it is an important part of thinking about this.

And it ties -- even though we're talking 19 about retail prices, that ties back to the licensing 20 because the level and structure of royalties can 21 affect the resulting retail prices.

Q. Turning now to the second objective, to 23 afford a fair return and fair income, how do you as 24 an economist think about this objective?

> Well --Α.

1 and you can talk about fair outcomes versus fair 2 process. And what I concluded was the -- the most useful or practical way of thinking about it here was really to focus on whether the process is fair. And, in particular, a conception that's often used in economics is that a process is fair if it's -- if it's competitive or the outcome of a competitive market. A competitive bargaining process is fair.

And so that's the -- the central notion of fairness that I used here.

Q. Can -- can you briefly describe what you mean by a competitive market?

Well, in particular, I'm going to start by saying what I don't mean. I don't mean a perfectly competitive market. And, again, I know from my participation in Web IV that this is an issue that has been before the judges before, but really think of the notion of effective competition, that there is multiple independent suppliers and the consumers have the ability to go back and forth 20 among the different suppliers in response to differences in prices or -- or product quality. 22

So, really, an essential element is that the buyers have choice. But it doesn't have to be the -- the textbook ideal of perfect competition.

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Q. Turning to the third objective, can you 2 briefly explain the economic interpretation of the relative roles objective?

A. So I will try to be brief and just say 5 that, particularly some of it's in the slide and in 6 my testimony, I think there's a lot of overlap with 7 reflect relative roles in terms of the first two 8 objectives, which is to say if you're not reflecting 9 the -- the contributions that each side makes, 10 you're unlikely to be maximizing availability.

11 And also I think argue both -- both 12 intuitively but also in terms of what a competitive 13 or effectively competitive market would do, that you 14 would expect the fairness, that you'd -- that you 15 would compensate or reward both sides for their 16 contributions.

But I also think on top of it, the 18 emphasis or the statement in the statute about 19 contributions and investments just highlights the 20 point that in thinking about both maximizing 21 availability and reflecting relative roles, we 22 should take sunk investments into account because 23 that's a form of contribution.

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Q. Could you provide an example of the type 25 of sunk cost that you would recommend be considered?

THE WITNESS: Yeah, I do think that --

2 and that's something that I will talk about, that

3 opportunity cost is a relevant concept here because

4 otherwise, I mean, again, you could -- you have this

5 extreme view that just says once the intellectual

6 property is created and it's there, you say the cost

7 is zero. And I think that's missing important

8 factors, both the sunk costs and thinking about the 9 opportunity cost.

JUDGE STRICKLER: You will be addressing 11 the opportunity cost later?

12 THE WITNESS: Yes, I will.

13 BY MR. MARKS:

14 Q. Finally, the objective of minimizing 15 disruptive impact, how from an economic perspective 16 do you interpret that objective?

17 A. So I think about it, I want to be clear, 18 on a continuum, because I know some people think of 19 it as more binary, but think of it as a general 🕕 🕕 20 matter that disruption is minimized if you're 21 preserving the status quo, but I don't take -- as I 22 say, both as just a continuum view, but also that

23 it's not always the case that you minimize

24 disruption by preserving the status quo because it 25 -- it could be that the status quo is unsustainable,

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So what I mean about that is you think 2 about it with a songwriter. Once the song is 3 written, the work is done. You can't get the work 4 back.

I mean, the cost has been incurred. And 6 one could take the point of view that says, well, 7 now that the song is created, the -- you know, the 8 cost -- there's no cost anymore of using it, so why 9 should you compensate somebody, and you think that's 10 just wrong. When you take a longer-term view, 11 you've got to take into account that the -- I think 12 the person both for fairness deserves to be 13 compensated for the -- the costs that have already 14 been incurred but also because of creating 15 incentives going forward.

If everybody expects that once they sink 17 a cost, they're not going to ever be compensated for 18 it, they're not going to be willing to invest in 19 writing songs or, in the case of a service, invest 20 in all the expenses that the Services have while 21 they're trying to create a successful financial 22 model.

23 JUDGE STRICKLER: Would you include in 24 those costs the opportunity cost of -- to the -- to 25 the licensor of being able to license?

1 so that if you saw an industry that was in really

2 dire economic condition, I don't think it would be a

3 reasonable interpretation to say, oh, we're

4 minimizing disruption, let's just keep doing things 5 as they are, because by hypothesis, things are

unsustainable and going badly.

7 But as a general matter, if an industry 8 is economically healthy, I think maintaining the status quo is what minimizes disruption.

Q. Have you reached a conclusion as to 11 whether maintaining the status quo is unsustainable 12 for the 2018 to 2022 rate period?

A. And you're saying maintaining the status quo in terms of streaming services and publishers and writers?

Q. Yes.

17 A. And, yes, my conclusion is that while the 18 industry is facing challenges, that, in fact, the status quo in terms of -- if the status quo would mean maintaining rates and structures, that, yes, 21 that is sustainable.

Q. And what -- what considerations have you 23 looked at in reaching the conclusion that the status 24 quo is sustainable?

A. Well, as summarized here, there are data

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1 that I cite in my report and certainly the judges
 2 are hearing from other witnesses as well, that on
 3 the content side, that the Copyright Owners are
   continuing to create music and to publish musical
   works, substantial amounts of it. On the
   interactive services side, though, I'll be
    discussing the fact that the firms, at least a firm
   like Spotify, is not profitable. They have been
    willing to invest and appear to be continuing to be
   willing to invest for the prospect of future
11 profits, and that they have been a growing and
   increasingly important source of music distribution.
13
               So we've got music being produced or
14 musical works being produced. We've got firms
15 willing to invest in the distribution. And, as I
   said, while the industry clearly has challenges, it
    also shows that it's moving ahead and it's
    generating a lot of consumer benefits.
               JUDGE STRICKLER: Just a question for
19
20 you, Dr. Katz. You say that the status quo is
21 sustainable. And I know this may be getting ahead
   of ourselves a little bit because you introduced the
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1 and we've got the same buyers and sellers on the two sides, I think the economics really says it makes sense to think about the combined amount that's being paid for a mechanical and performance license. And so I don't think it makes a lot of sense from the perspective of economics, and I understand there may be separate legal issues and I'm not offering legal opinions, but I don't think it makes sense to separate them out.

And so, you know, my understanding from 11 hearing from a Pandora executive who was involved and said, look, we agreed to this, the Services 12 agreed to having the floor, because we thought it wouldn't be binding. And, clearly, the Copyright Owners wanted to have a floor.

JUDGE STRICKLER: And when you say it wouldn't be -- they felt it wouldn't be binding, you understood that it would -- it would never be triggered; by "binding," you mean never triggered? THE WITNESS: That's right. It's their interpretation, and what he relayed to me was it 21

JUDGE STRICKLER: So -- so you don't see 23 24 any economic justification for the existence of the 25 mechanical floor in the rates either in the 2012

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1 settlement or if it existed prior or if it were to exist going forward in the new rate period; you can't identify any economic benefit to mechanical

wouldn't be triggered, that's right.

floor.

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THE WITNESS: I -- I think that's correct, thinking about it purely from the perspective of the economics, yes.

JUDGE STRICKLER: Thank you.

BY MR. MARKS:

Q. I'd like to turn now to your analysis of the appropriate rate structure and rate level. Have you taken a benchmarking approach for assessing reasonable rates and structure for the statutory license at issue in this proceeding?

> A. Yes, I have.

Q. And why did you take a benchmark approach?

Well, you know, an alternative would be to try to build a model of the industry and then use that model to make predictions about how different structures and rate levels would affect industry performance. And it just -- well, it's certainly beyond my abilities. And I think there's probably an agreement among the economic experts, it's beyond any of our abilities to construct such a model.

1 relates to the benchmark; you are advocating for a 2 lot of the status quo but not all of it. Is that a fair statement?

mechanical floor issue and you're going to address

24 it, I know, again, in your testimony, but you're

25 really not advocating for the status quo as it

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THE WITNESS: That's correct.

JUDGE STRICKLER: And, again, I apologize because this may be getting ahead of ourselves a bit, and I know you're going to get into it in more detail, but do you understand that there was ever a time when the mechanical floor was a reasonable portion of the -- of the royalty structure?

THE WITNESS: So when you say it's a 12 reasonable portion, I don't -- I'm trying to figure 13 the right way to say this so it doesn't sound flippant, but -- so let me say I apologize in advance, if it does come across that way.

I think in some sense what the economics says is it was reasonable as long as it wasn't actually binding.

JUDGE STRICKLER: That does sound a 20 little flippant.

THE WITNESS: Yeah, and that's why I apologize. In fact, I just can't think of a better way to say it. But what I mean by that, and this is jumping ahead a little bit, is that because we're 25 talking about rights that are perfect complements

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And so instead take a benchmark approach, try to rely on the expertise of the industry and 3 what the industry has figured out works.

Q. And what is the primary benchmark that vou use in vour direct testimonv?

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A. As I said, the primary benchmark is the 2012 settlement as applies to Subparts B and C.

JUDGE STRICKLER: I have a question for 9 you. It's sort of a high-level type -- type of 10 question, rather than getting into the -- into the 11 details for the moment. Are you saying that the 12 2012 settlement is a -- is an excellent benchmark 13 because it continues the status quo or because, 14 independent of whether it ever was the status quo, 15 these are the right rates and this is the right

16 structure for this industry? THE WITNESS: Yeah, it's not because it's 18 the status quo. So to be clear, because I think 19 maybe the slides create a little bit of confusion, 20 the -- the previous slide saying -- about I thought 21 the status was sustainable, I was making the point 22 there in terms of how I would then think about 23 worrying about disruption and saying that it seems 24 to me that maintaining the status quo wouldn't be 25 disruptive.

2 that. One, I'd say it's a good -- on the second 3 part, it's a good benchmark, like I say, because 4 it's the status quo that's working, okay? If we 5 | said, okay, it's the status quo but we saw the 6 industry performing poorly, then I wouldn't conclude 7 that you'd want to continue it. So first off, it's really critical to 9 have the assessment that the industry is performing 10 well. And then the second thing is -- is that it 11 didn't just -- you know, sort of just emerge; there 12 was a particular process. And I do think the fact 13 that it emerged as a settlement and that it -- that 14 happened in the shadow of a potential statutory 15 proceeding, I think the process by which it arose is 16 relevant here. 17 And that is something we will talk about, 18 and I know that's something that has been criticized 19 by experts on the other side. That's something 20 we're planning to address. 21 | JUDGE STRICKLER: Thank you. 22 BY MR. MARKS:

O. Okay. Back up just a moment just to make

What is it, in your view, about the 2012

24 sure that we get a complete record on this point.

1 THE WITNESS: So I would say two parts to

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Now, ultimately, I conclude, as you pointed out, that a modified version of the status 3 quo was the right thing to do going forward, but 4 that's in some sense a separate conclusion, which 5 is, as I say, I've looked at the 2012 settlement, 6 looked how the industry has performed under it, and then concluded that, subject to modification, using 8 the 2012 settlement going forward is an appropriate 9 thing to do.

JUDGE STRICKLER: Well, here's -- here's 11 my question that follows on that. If the 2012 12 settlement is not a benchmark because it's the 13 status quo, that suggests to me you're saying that 14 if it hadn't existed, somebody would have to have 15 invented it because it's a good -- it's a good 16 structure and it's a good level of rates within that 17 structure.

But is there anything in your testimony 19 that explains sort of a buildup, how do we build up 20 to -- to that, how do we create that structure and 21 how do we build up to the rates that are in that 22 structure, other than simply relying on what already 23 exists, which really sounds like it's taking us back 24 to saying it's a good benchmark because it's the 25 status quo?

1 settlement that commends itself as a benchmark? A. Well, I'm saying there are two parts. 3 One is that -- well, if you say purely as a 4 benchmark before deciding what do we learn from the 5 benchmark, it is the fact that it was created under 6 this bargaining situation where I think there 7 largely was a balance of power; there weren't 8 | apparent asymmetries | in market power, bargaining 9 power, that would have distorted the settlement. 10 And as I say, I think, you know, a bunch of the 11 credit for that goes to the -- the statutory shadow, 12 but it's -- but that it emerged through a particular process I think is important. 14 Q. And does the 2012 settlement involve

- 15 similar parties? A. Yeah, no, it does. In terms of what
- 17 makes it -- actually, I'm jumping ahead, I 18 apologize, because of Judge Strickler's question.
- 19 But, yeah, I mean, the other things it has, it has 20 similar parties and also the fact that it covers an
- 21 identical set of rights, which is an advantage in
- 22 looking at a benchmark because it means there's less
- 23 need to make any sort of adjustments or, as we 24 talked about this morning before I was in the room,
- 25 need to make conversions.

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JUDGE STRICKLER: A question. I just
 2 want to make sure, first of all -- well, maybe you
 3 have it right here. You said -- yeah, it's on --
 4 it's on the screen. You said there were no apparent
   asymmetries in market or bargaining power.
              Now, I know in your testimony -- and
 6
   correct me if I'm wrong, because there is a lot of
 7
   different testimony here, and I could forget and
 8
   confuse it -- but you talk about the need for
10 effective competition and the fact that the
  recording or the rights that are at issue,
   mechanical rights, are must-haves for the streaming
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   services. Correct?
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              THE WITNESS: Yes.
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               JUDGE STRICKLER: Well, if they're
   must-haves, wouldn't that be consistent with an
   argument from you that there are asymmetries in the
   bargaining power; that is, that the licensors have
   greater bargaining power because of the -- of the
   must-have requirement of having these?
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801(b) objectives.

Now, let me -- I'll point out the word "reflect" chosen carefully because I'm not saying that the parties will say to themselves: Okay, let's go out and -- and try to achieve the 801(b) objectives. What I'm saying is that the parties' private interest in the shadow of the statutory proceeding will tend to coincide with the statutory objectives.

And I also want to be clear I'm not 11 saying that's true regardless of whatever the statutory objectives happen to be. I'm saying it's true of the particular 801(b)(1) objectives. 13

JUDGE STRICKLER: Is it really the case, 15 though, that in voluntary settlements, the parties 116 would try to -- would tend to reflect the 801(b)(1) 17 objectives or would they rather reflect what they think the judges would think are the 801(b)(1) 18 objectives, you know, the average -- what does the 19 average opinion think average opinion is?

THE WITNESS: So I think where they have 22 to do the predictions as to what do they think that 23 you were going to think has to do with how people 24 think -- what the parties think -- how they'll come 25 out overall, if they're to go through the statutory

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And that's actually one of the reasons 2 that the third bullet is so wordy, is I think it 3 matters that we're talking about industry-wide settlement negotiations, and we're talking about negotiations that are taking place in the shadow of the statutory proceeding.

THE WITNESS: So -- so, absent the

services and publishers, I'd be very concerned about

statutory shadow and particularly if you were talking about negotiations between individual

So that those factors help offset the possible asymmetries.

JUDGE STRICKLER: Thank you.

10 BY MR. MARKS:

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25 that.

Q. And can you please explain why the fact that there were no apparent asymmetries makes the 2012 settlement an excellent benchmark?

13 14 A. So I think the thing to do is actually 15 turn, if we could, to the next slide with -summarize that. And as you can see from the title of the slide, it's saying that when we're looking at 18 voluntary settlement, which is what we're talking about with the 2012 settlement, that are evenly 20 matched, and as we've just talked, the evenly matched here comes both because we're talking about 22 industry-wide negotiations and because we're talking about something taking place in the -- the shadow of a potential statutory proceeding, okay, that in that

25 case, that the outcome will tend to reflect the

proceeding.

But it's not a matter of guessing what the judges will say -- I'm sorry, I'm talking in the third person here.

JUDGE STRICKLER: That's okay.

THE WITNESS: But what you'll say on each individual -- you know, what you'll say about the particular rate structure or something like that. Really what's -- it's affecting their disagreement points and saying here's what happens.

So they do need to form a prediction of how well they'll fare overall, because a rational party is not going to agree to a settlement if that party thinks it could do better by going to the proceeding.

But after they -- but once they get that 17 and they say, okay, we've got to make sure we're each doing at least as well as we could through the proceeding, they then will set about and say what do we do that's the best for both of us and we'll try 21 to jointly maximize.

And what I'm saying is when they think 22 23 that through, it turns out that those private 24 interests will -- they'll -- well, let me just give you an example. They'll tend to want to maximize

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1 availability, all else equal, because if they're 2 more or less evenly matched, they know that neither 3 one can succeed without the other, right? Streaming is important to music 5 distribution now, so if the Copyright Owners got a

6 deal that was so good that it -- you know, good here 7 means the price was so high, the royalty rate so 8 high that it killed off streaming, that would be bad 9 for them.

And, similarly, if the streaming services 11 said, oh, we can get this stuff for free and that 12 turned out to destroy songwriting, that would be bad 13 are for them. So what I'm saying here is the 14 parties naturally have incentives to try to promote 15 availability.

Now, it's not unlimited, right? We know 17 monopolists can restrict output, and I might say, 18 well, it's true that I'm making the total pie 19 smaller by having a really one-sided agreement but 20 that helps me and so I'm willing to do it to get a 21 higher share. But if we're relatively balanced in 22 terms of our bargaining power, then that's going to 23 push us towards maximizing availability.

And that's going to be true regardless of 25 what our particular predictions are about what

A. I'm open to page -- the paragraph 28 on page 15. Q. Yes. And turning to the point that

Dr. Eisenach raises in the first three sentences of paragraph 28, how do you respond to -- to

Dr. Eisenach's criticism on this point? 6

7 A. Okay. So, first, let me give my interpretation of what Dr. Eisenach is saying. So -- well, he's asserting that bargaining theory -well, as it says, that you're not going to have a bargain that satisfies the objectives of a 12 third-party arbitrator. And he says, instead, he 13 says what's going to happen, along the lines of what 14 I was just discussing, is that you'll have to ask yourself as one of the bargaining parties: Well, if we can't agree and we go in front of this arbitrator, what's going to happen? 18 And so then, as he's saying, you have to 19 figure out how well you'll fare overall. And then

20 that will influence our private bargaining because each of us will say, well, I have to get at least as good a deal as if I went to arbitration. Okay? 23 But then what he's saving is, on top --

24 he goes, well, that may be true but what does that 25 have to do with the specifics of what people end up $^{-1}$

1 agreeing to? Okay? It just says we have to at

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1 you're going to do if -- what you would do if there 2 were to be a proceeding.

3 BY MR. MARKS:

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- 4 Q. Are you aware that Dr. Eisenach disputes 5 your conclusion that the 2012 settlement is a 6 desirable benchmark in part because it reflects the 7 801(b) objectives?
- A. Yeah, to be clear about your question, I 9 don't think he's saying -- he's disputing my claim 10 that it will reflect the 801(b) objectives as 11 opposed to he's not objecting because it does. But, 12 yeah, I know he has raised concerns and objects in 13 saying -- I guess, disagreeing with the statement 14 that it will tend to reflect the 801(b)(1) 15 objectives.
- Q. Well, let -- let me put the actual 17 language in front of you so we don't suffer from my 18 characterization or mischaracterization of what 19 Dr. Eisenach has actually said.

20 In your binder, you should have a copy of 21 the written rebuttal testimony of Jeffrey

22 A. Eisenach.

A. Yes.

Q. Could you turn to paragraphs 28 to 30 of 25 Dr. Eisenach's written rebuttal testimony.

2 least do at least as well, but why does that tell us 3 anything about the details of our agreement? Our 4 agreement is going to tend to be what we think is 5 ever best for us. And I agree with that statement, and if 7 -- if his proposition is, as a general matter, the fact that something may go to an arbitrator does not 8 9 imply that we will necessarily do what the arbitrator wants or the objectives -- I agree with 11 that as a general statement, but that's not what I'm 12 saying. 13 What I'm saying is that, given the -- the

14 arbitrator here being the CRB, and given the \circ 15 specific 801(b) objectives, that then the shadow of 16 the proceeding will lead the parties to meet those 17 objectives, but it's not that they would meet any 18 objectives. Just to make up a silly example to 19 illustrate the logic, you know, if for some reason a 20 statutory objective was that all -- you know, all

21 license contracts have to be -- have to be on purple 22 paper, right, there's no reason to think that a

23 private agreement, anyone would come up with that 24 and say, okay, let's do that. Okay? But that's not 25 what the 801(b) objectives are.

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They're things like maximizability, which
2 I said there's private incentives to do, and I won't
   go through the rest of the slides -- the slide
   there, but it's about specific objectives, and those
   specific objectives, the parties do have incentives
   to roll into their private agreement.
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So it's making a general statement that I think just doesn't apply to the specifics that matter here.

JUDGE STRICKLER: Well, the second 10 11 objective, though, is afford a fair return, fair 12 income, as you correctly describe it in shorthand, 13 but you describe fair in economic terms as 14 effectively competitive. But when parties are 15 bargaining, they don't necessarily want an 16 effectively competitive market; they want to 17 maximize their profits over whatever particular 18 period of time makes sense for them in their time 19 horizon. So they don't really care under economic 20 theory whether the other side gets an effectively 21 competitive rate. If I understood your testimony 22 correctly, what they care about is that the other 23 side survives so that there can be either licensed

product to distribute or a licensee to distribute

25 the product. Survival of your bargaining -- your

the shadow gets filtered through whoever the judges are. If you were one of the judges, effective competition might well be the standard. If another economist was one of the judges, effective competition might not be the standard. They'd have 5 a different way of describing fair return or fair income, and you'd get a different result. 8

So, again, it sort of goes back to my 9 other question, which is the settlement is reflecting not just what the 801(b)(1) objectives 10 are, right, but it's reflecting what you -- what the bargaining parties think these particular or those particular judges on the CRB thought of these 13 14 objectives and how to apply them? 15

THE WITNESS: And so I agree with that in 16 terms of the parties' assessments of how they would fare if they went to -- if they had to go to the proceeding, and I would expect that to affect rate 19 levels, as I suspect I'm going to be asked about in 20 a minute or two.

I think, though, those expectations or the predictions about the then sitting judges would not affect -- not necessarily affect things like the 24 rate structure.

JUDGE STRICKLER: But it would affect --

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counterparty is important, not thriving of your 1 counterparty.

THE WITNESS: I completely agree with that. That's why it is important that this is taking place in the shadow, again, of a particular statutory regime, where -- it's my interpretation of it and my expectation and my belief about what the parties thought is that it's balancing the 9 bargaining power so that, in fact, each party knows 10 that if -- if it sees itself as getting a really bad deal in the private negotiations, it has the alternative to go to a statutory proceeding where it 13 will not get such a bad deal.

So in that way, it's -- that's this point 15 about it's important that it's evening out the bargaining power, because I agree if you had one 17 side in a private negotiation that had way more 18 bargaining power than the other and a much better position, say a monopolist, we know a monopolist 20 will sacrifice some availability in order to get a 21 bigger share of the gains. That's why I think it's 22 important that we have this -- the shadow to try to 23 balance those things out because that's what's then 24 getting us to fairness, helping get to fairness. JUDGE STRICKLER: But, again, of course,

1 well, it would affect disagreement points, threat point in the bargaining, right?

THE WITNESS: That's right. That's what I'm saying, that will tend more -- I'm going to just jump ahead -- yeah, just jump ahead because -- well, one of the other points -- well, let me say this.

Part of what Dr. Eisenach is saying which I agree with in this is where he says, well, look, with these multiple dimensions, that they're going to have incentives to try to optimize what's best for the parties collectively going through the bargaining, okay? And that can be things like the rate structure. And what they do on that can be largely independent of what they expect to happen, if they were to go to what he's calling arbitration, because all arbitration is doing, as he has modeled it, is saying, okay -- as he has modeled it, it's saying here's the -- here are the surplus levels you each get. Right? He's not saying anything about the details of how things have to be done.

21 So the parties still see themselves, the 22 way he has modeled it, as having the flexibility to set all these other dimensions, and then that won't 23 affect what ultimately would be done by the judges. 25 The only role the judges have is in setting the

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1 reservation surplus levels.

2 BY MR. MARKS:

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Q. If I could direct your attention to paragraph 29 of Dr. Eisenach's written rebuttal 5 testimony and ask you to read the first sentence of that paragraph and let me know how you respond.

A. Okay. So what -- well, what he's saying 8 here, I guess, pretty much speaks for itself, that 9 he's saying that -- it is, typically, the judges 10 consider market-based benchmarks. And what I was 11 trying to say, I think, and not particularly well, 12 is that you actually think about his first point, 13 he's saying that, in fact, much of the -- or as 14 logic implies, that much of the 2012 settlement is, 15 in fact, market-based, because when it comes to 16 things like the rate structure, the parties are 17 determining what it is that's in their best 18 interest, given that each has the threat to go to a 19 proceeding, but that proceeding is not -- right, 20 it's just -- again, it's playing the backstop role 21 of setting a surplus level or a reservation level, 22 but it's not telling the parties here's specifically 23 what you have to do in terms of how you structure 24 your agreement.

So his first point actually is -- his

1 affects what the private parties will do in their 2 negotiation in terms of coming up with a structure, 3 is they say all right, if we don't reach an

4 agreement, we're going to go to the CRB and we're 5 going to get some -- there's going to be some rate

6 structure, there are going to be rate levels. That's going to give rise to certain levels of

surplus for each of us.

10 that tells us, each of us, you know, how far am I 11 willing to go before I say no, I'd rather have the 12 proceeding. Given that, now we come to -- it's our 13 turn in our private agreement to say what rate 14 structure we want to have. That rate structure, 15 right, we should come up with the one that we think 16 works best for us collectively, and then figure out 17 how to divide the surplus. $x_1,\dots,x_{n-1}\in \{1,\dots,1,\dots,1\}$

But they then work back and say, okay, so

118 And in a sense, it doesn't matter what 19 the judges would say is the right rate structure. 20 The only thing that matters, if you think about it 21 through economics, it's almost like it's a

22 sufficient statistic, all we need to know is what 23 the surplus levels would be. Okay? So we say,

24 look, those are the surplus levels, so we know

25 neither one of us is going to accept a worse deal

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1 first paragraph, paragraph 28, is saying when it 2 comes to things like the structure of the royalties 3 that we see in one of these settlements, that's actually market-determined because that's not based 5 on guessing precisely how if the judges were to 6 impose a structure, what structure they would 7 impose; it's saying given that we're avoiding going 8 to a proceeding, what structure do we think works 9 best for us? 10

JUDGE STRICKLER: But don't the judges 11 have to set a structure? Isn't that in part what 12 this proceeding is all about? We have a fight over 13 what the structure of the rate will be, whether it 14 will be a per-play rate or whether it will be a 15 percentage with various minima or a floor, perhaps? So when you're figuring out disagreement 17 and threat points, it's not -- you have to figure

18 out whether or not the judges are going to accept 19 structure A or structure B, which is clearly not 20 theoretical but highly contentious. That's why 21 we're sitting -- one of the reasons why we're 22 sitting here right now.

23 THE WITNESS: No, that's right. But, 24 again, the way -- and this is the point Dr. Eisenach 25 is making, which I agree with. It's the way it

1 than that, but now in our private negotiation, let's 2 figure out what rate structure works for us. And that actually -- once you know what 3 4 the surplus levels are, that's actually independent 5 of what you believe the CRB might do in terms of the 6 rate structure it would put in place. And as I say, 7 I take it that that is Dr. Eisenach's first point, 8 and I think that that point is well taken. JUDGE STRICKLER: Thank you.

10 BY MR. MARKS:

Q. If I could turn your attention to the 12 first -- well, it's actually the entire paragraph 13 30, which is one sentence. If I could ask you to read that paragraph and let me know how you respond. 15 □ □ □ A. □ All right. Well, again, this is -- you

16 know, he's saying -- it's making the point that we 17 wouldn't expect the parties to have a perfect 18 prediction. I certainly agree with that. The

19 parties have to form their best beliefs. But I don't think there's any requirement 21 that they have -- for this approach to be valid,

22 there's any requirement for them to have a perfect 23 prediction, but, in fact, it's one of the reasons

24 why I need to check and why I did spend time

checking whether the actual settlement seems to be

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1 working.

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I mean, first off, it could be that -- I 3 mean, whether or not the prediction was accurate, it 4 could be that based on their predictions, the 5 parties agreed to something that turned out really didn't perform well and that the industry was starting to fail and that consumers' interests weren't being met.

And if we saw that, I would say then it's not a good benchmark; it's something that was -going to have to be changed. And so I agree that predictions can be wrong, but that's one of the reasons we've got to then look and see how did it actually perform.

- Q. And did you do such an analysis?
- Yes, I have. Α.
- If we could go to the next slide, please. Perhaps with reference to the next two slides, can you just briefly summarize for context of our discussion today the structure and rates called for in the 2012 settlement that you use as a benchmark?
- 23 A. Okay. And I alluded to some of this in, 24 I quess, what was my second slide. So what I would 25 point to here is that -- a few sort of key elements

1 And also within the minimums, it's a multipart formula, at least in three of the five cases.

And then lastly, what's shown there is 4 there's a floor, which, again, varies by the product type, and that floor is the one that applies just to mechanicals.

Now, if you look at, if we could, the next slide, the Subpart C, you'll see there's, you know, largely a similar structure. The things I would point out here are that the headline rates vary across products. And you see several of them. They have different headline rates than the Subpart C rates were. 13

But, again, we have the structure of 15 product-specific minimums. And notice here that one 16 difference is for Subpart C, you don't have the 17 floor that applies purely to mechanical royalties.

So that's in a nutshell the overall 19 structure of the licensing under Subparts B and C in the 2012 settlement. 20

- In your view as an economist, is having 22 different rates for different product categories 23 within Subparts B and C reasonable?
- A. Yes, I think it -- I mean, it does make 25 sense because there can be differences both in

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1 of the -- of the structure of the 2012 settlement. 2 So one is that, starting with just Subpart B, that 3 there's a headline rate, which you can see reading across the, I guess, the third row is the same, the 10 and a half percent, and that's the same for 6 several different products. 7

And I will try to be clear, when I say products, when I mean things like the difference between a stand-alone non-portable subscription or something that is portable. And I'll try to use "services" to mean different companies. I just 12 apologize that in my written testimony, I used "services" both ways. I used "services" sometimes to distinguish between, say, Spotify and Pandora, and sometimes used the term "services" to mean what I'll try today to call different products.

So here we see they all have the same 18 headline rate within Subpart B, and that that rate, the headline rate, applies to both the performance and mechanical royalties. Then we see there's a second component, which is the minimums, which, again, apply to the sum of the mechanicals and performance royalties.

And there we see, if you go across, that 25 the minimums can vary by the particular product.

1 consumer demand or willingness to pay for different products, and also there can be different costs, 3 including opportunity cost, for the different products. So it can be sensible then to have -- in the interest of both the Copyright Owners and the Services and consumers to have rates that reflect those differences and vary across products.

- Q. Let me ask you about some of the rate 9 structure components that you've just identified. From an economic perspective, is it appropriate to have a single all-in rate that covers mechanical and performance rights?
- 13 So I've concluded that it is because I think I mentioned already today, the mechanical 14 rights and the performance rights of musical work 15 are perfect complements from the perspective of an 116 interactive service, which is to say you need to 17 have both rights, sets of rights. Either one alone 19 is going to be worthless. You're buying them from the same party. You know, the buyer is the same. 20

21 And so really, in thinking about the 22 values of these things and willingness to pay, I think economics really says you have to think about 24 them together. And, again, I make up unrealistic numbers, but if you think of the package as worth 15

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1 dollars to you, if you have to pay 10 dollars for 2 one set of the rights, then the other rights are 3 only going to be worth 5 dollars to you. If you 4 have to pay 7 dollars for one set of rights, the 5 other rates are only going to be 8. So they're 6 pretty much inextricably linked.

And so I think it does make sense to talk 8 in terms of the headline rate because it's the 9 overall value that's going to matter to you.

- Q. Is it economically reasonable to have the 11 headline rate be expressed as a percentage of the 12 revenue of the interactive service?
 - A. In this case, I think it is, yes.
 - Q. And why is that?
- 15 A. Well, I mean, the -- the biggest thing, I 16 guess, would be -- I would say, that the parties 17 have seemed to determine that, in fact, that it 18 works for them and that it's something they've come 19 to in their agreement. And that we also see that in 20 other agreements, for example, between the Services 21 and record companies.

22 And so it's a structure that people in 23 the industry have decided works. I would say that's 24 the Number 1 reason.

Q. On whose behalf did you testify in the

1 disruption, because, again, we were adding a 2 percentage of revenue there where it's something 3 that at the time did not exist, and I also expressed

4 concern that there would be measurement issues.

5 Q. Would continuing the use of a percentage 6 of revenue structure create disruption in this proceeding?

A. So, I -- I mean, what you're pointing out is a big difference here, as there the industry was 10 using per-play, and the question was did it make 11 sense to add a percentage of revenue prong to it?

12: And here we're talking about an industry 13 where they're already using percentage of revenue, 14 so it's not disruptive in that way in the sense that 15 it's not changing the status quo.

Q. Have interactive services continued to 16 17 invest and inhovate under the current percentage of 18 revenue royalty structure?

19 A. Yes. What I've seen indicates that they 20 have been innovating and that they are continuing to 21 invest.

22 Q. Do you have any reason to believe that 23 there would be more investment and more innovation 24 under a per-play rate structure?

25 A. And you're talking about a per-play rate

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1 Web IV proceeding?

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- A. The National Association of Broadcasters.
- Q. In your Web IV testimony, what rate 4 structure did you conclude was reasonable for 5 calculating the royalties payable by non-interactive 6 services to record labels?
 - A. A per-play rate.
- Q. Why did you conclude that a per-play 9 structure in that setting was more reasonable than a 10 greater of formula with both a per play and a 11 percentage of revenue prong?
- 12 A. Okay. So what was -- what was happening, 13 I remember this, in Web IV is the existing structure 14 was a per-play rate. And then the record companies 15 were proposing to add on top of that a percentage of 16 revenue prong.

17 And I raised several economic objections 18 to that. As you all know, ultimately, you didn't --19 CRB did not put in the -- did not add the revenue 20 prong.

21 I was concerned with effects it would 22 have on risk sharing by adding that, the revenue 23 prong. I was concerned with effects that it would 24 have on innovation. I know -- I guess those are the 25 biggest. And then just generally creating

1 structure particularly for interactive services?

Q. Yes, exactly.

A. Is that correct?

O. Yes.

A. Yeah, so -- yeah, for interactive 6 services, and this is something that I think is

7 really different between interactive and

8 | non-interactive services, so what it really comes to

9 is a difference between subscription services and

10 ad-supported.

11 And in the case of interactive services, 12 we're talking about primarily having subscription 13 services. And with subscription services, I mean, I 14 do have a concern, as an economist, or economics 15 identifies the concern that a percentage of revenue 16 royalty can have effects -- can have adverse effects 17 on the incentives to innovate because if a service 18 figures out a way to get more value out of -- by 19 investing, more value out of existing music, it's 20 going to have to share some of those gains. And 21 that's going to attenuate its incentives. 22 | | But the thing is with subscription 23 services, that's also going to be true if you do it

24 on a, say, per-subscriber basis or per-play basis 25 because the way 4- my understanding of the way the

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1 industry works is what firms do to innovate and 2 compete is they try to figure out how to make their 3 services more attractive to consumers, to get more 4 customers, get more engagement. And so whether you 5 look at things, look at royalties based on plays or subscribers or revenues, all of those things, if you innovate, you're going to have to share some of those gains, and that's going to attenuate your 8 innovation incentives. So there's really -- there's no -- there's no silver bullet here. Now, in contrast, if you go back to Web 111 12 IV, the main -- the main revenue model is an advertising-based one. And there, if you have a --14 the thing about with a per-play rate, if the way -the way you innovated to get more revenue there was

And if you did that and then you could 19 get more advertising revenue, you would keep all of 20 that at the margin because it wouldn't be -- it 21 wouldn't affect the number of plays. It's all 22 happening in your relationship with advertisers. And so there you actually have a solution that gets rid of the problem of attenuating the investment

to figure out how to make your product more

attractive to advertisers.

1 clear, you're talking about, I guess, in the long 2 quotation of me, what he's saying in the third paragraph that rolls across from page -- from 29 to 4

Yes, exactly right.

A. Yeah, and I do stand by that. I mean, again, think about this in the context of -- and, you know, this comes back to Judge Strickler's question about opportunity cost. Okay?

So opportunity cost here from the point of view of a licensor is asking, well, if a consumer 12 is using these particular services, does that mean they're not buying music in some other form? That's a consumer-side phenomenon. 14

Now, think about what's happening, 15 though, with an ad-supported service. Okay? What's affecting your revenues per play is how well you're 17 appealing to advertisers. Okay? 18

And as far as I've been able to discern, 20 how well you appeal to advertisers and how much money you can get from advertisers, I just don't see 22 a link between that and the record company's costs, who are generally to a copyright owner costs, 24 because it's really about the advertising side of 25 things, not about the music consumption side.

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So this distinction between whether we're talking about an ad-supported service or a subscription service is important in thinking about these issues.

5 0. Are you aware that Dr. Rysman -- is it 6 Rysman or Rysman?

MR. JANOWITZ: It's Rysman.

THE WITNESS: Rysman.

BY MR. MARKS:

25 incentives.

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Q. Rysman, I apologize. Are you aware that Dr. Rysman has criticized your written direct testimony in his rebuttal report in this proceeding?

Yeah, I have noticed that.

You should have a copy of Dr. Rysman's written rebuttal report in your binder. And when you get there, if I could direct your attention to paragraph 49 on page 29.

> Α. Okay, I'm there.

Paragraph 49 of his written rebuttal 20 testimony, Dr. Rysman quotes you as stating in Web IV that there is no direct link between a webcaster's revenue per play and the record 23 company's cost of licensing to that webcaster.

Do you stand by that statement?

Yes. And I mean just to make sure we're

So I think when you're talking about an advertising-supported service, you know, I really --I just don't see a link there. Now, I notice that's somewhat different when you're talking about a subscription service because with a subscription service in part the subscription rate is going to have to reflect consumers' willingness to pay.

And so when you see some where consumers have very low willingness to pay, that may also suggest to you that the -- the opportunity cost is low because those consumers were likely not to have been buying music anyway, and so there, there may be some linkage.

But what I was really addressing here is the lack of a linkage for advertising-supported services because that's what really matters for non-interactive services.

In the next quoted paragraph at the top of page 30, Dr. Rysman quotes your comments about the differences in sellers' costs and the -- the relevance of that or the potential relevance of that to pricing in an effectively competitive market.

Do you see that?

JUDGE STRICKLER: Which paragraph are you

25 on?

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MR. MARKS: It's the first full paragraph on the top of page 30.

JUDGE STRICKLER: Within the quote? MR. MARKS: Within the guotes, yes.

JUDGE STRICKLER: Thank you.

THE WITNESS: So, yes, I do see that. If you could just repeat the question.

BY MR. MARKS: 8

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- 9 Yeah. The -- he is quoting your written 10 rebuttal testimony, the paragraph beginning "Dr. Rubinfeld's proposed revenue prong."
 - A. Yes.
 - Do you see that --0.
 - Α. Yes.
- 15 -- that paragraph? Do you stand by the 16 statements in that paragraph?
 - A. Yes, I do.
- 18 0. Has Dr. Rysman, in his written rebuttal 19 discussion of your Web IV testimony, captured in 20 your view all of the necessary context to understand 21 the point you were making in your rebuttal testimony 22 in Web IV?
- 23 A. I don't think he has because what I was 24 doing was responding to some particular claims 25 Dr. Rubinfeld was making that he was asserting were

1 services and products.

O. Let's turn now to the second component of 3 the 2012 settlement structure that you mentioned, the minimums.

Did you reach an opinion as to whether it is economically reasonable to have minimums as an 6 alternative to the headline rate that covered both mechanical and performance rights? 8

- A. Yes, I did.
- Q. What did you conclude?
- A. I concluded it is reasonable to have the 11 12 minimums and to keep them. And the primary reason 13 for that is because of the measurement issues that 14 can come up when having royalties based on a +- | 15 based on a percentage of revenues because there can 16 be issues about how to appropriately assign revenues 17 to a service. 18

And so I think the minimums can play an 19 important role when those -- you know, when those measurement problems are severe, you can turn to the 21 minimum instead.

- 22 Q. And do the minimums also protect 23 Copyright Owners from services with low rates of 24 monetization?
 - A. Yes. And think about protecting

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1 benefits of adding the proposed revenue prong. And 2 I was saying I didn't believe -- at least as I could 3 understand what he was saying, that I didn't believe 4 that he was making an economically correct argument. And as I said, I stand by that and it

6 relates back to some of what we were just talking about.

- Q. Is there a mechanism for reflecting differences in the rightsholders' cost in the 2012 10 settlement?
- A. So there are two. As I said, there may 12 be this indirect one, because we're talking about 13 subscription services, that when you have a 14 percentage of revenue basis, that that's going to 15 tend to reflect consumer willingness to pay, which 16 could then be linked to opportunity cost.

17 But the other one is more explicit and 18 direct, which is as we saw when we -- well, in fact, 19 the slide is still up there, that you've got the 20 product-specific terms so those can potentially --21 if the private parties want to, those can reflect 22 differences in costs or other factors that they 23 think matter across. And that contrasts with what 24 Dr. Rubinfeld was proposing, which was a single 25 percentage of revenue that would apply to all

1 services, what I have in mind, right, is that what 2 would happen if you could imagine an entrepreneur coming along and saying we want to have a service and have some incredibly low price and not a very good monetization model, where a copyright owner 6 would say -- in an effectively competitive market, would say, wait a minute, I don't want to license to 8 you on those terms. It's - I just think the possibility of getting a return is so low, I'm not 10 going to do it, even though you, as an entrepreneur, 11 are willing to try this. I as the copyright owner 12 want some sort of, you know, return on it. And 13 that's what the minimum also helps to do. 14 JUDGE STRICKLER: With regard to your 15 previous point, Dr. Katz, about the benefit of the 16 minimum, that there can be confusion or disagreement as to what is -- what it is or is not in the revenue' 18 base, so the minimum constitutes protection, if the

19 revenue is too low, but it -- but it doesn't solve that problem, it just sort of puts a floor on that 21 problem? 22 In other words, until you hit the floor,

23 you could have all sorts of gaming of the revenue, but as long as the revenue, percentage of revenue 25 rate that's paid is higher than what the floor would!

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1 be, you still have the gaming problem. It's just at 2 some point, we say that's all we can stand or we 3 can't stand no more. There's -- there's no more 4 fooling around with the rate; we're going to have -you've hit the floor and all the gamesmanship is over at that point.

So the problem persists, in other words, above the floor?

THE WITNESS: That is -- well, I think another way of saying what you're saying is it's important to get the level of the floor correct. And you can think of -- think of the floor as an alternative way of -- of collecting the revenues. And so I think you would want to take

15 that into account. I mean, you could even -- look, you could imagine a system that all you had was, say, a per-subscriber amount and you had nothing else. And then I think we wouldn't -- wouldn't think of it as people are gaming the system. We would just say that's the way we're collecting the royalties.

But I agree with you that if you have --23 you have the combination of the minimums and the percentage of revenues, there could -- certainly 25 could be cases where somebody -- if you -- if you

Q. And can you explain why you have concluded that the mechanical-only floor should be eliminated?

A. The slide will summarize it, but in

particular, it's the concern that the fragmentation of performance rights licensing can threaten to raise royalty rates and it would do so -- and the reason it matters that it's through the fragmentation is it's saying it would raise performance royalty rights -- rates because of the exercise of market power and the Cournot complements 12 problem.

So to step back or to talk about what are

15 got -- we have -- at the time, we had the three 16 performance rights organizations, right, the two big ones, ASCAP and BMI, and they're subject to a 17 18 consent decree. And then since then, we've a fourth 19 one come in, so that has been a form of 20 fragmentation and -- and GMR. And while they're small, you know, in terms of the number of writers 22 who are members, they have some very important 23 writers such as the estate of John Lennon, and I 24 believe also Bruce Springsteen is with them. So

14 some of the relevant developments since 2012, we've

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1 did it based on revenues, they might pay more than 2 they will under the minimum, and that may be too 3 hard to measure, so they pay less. That certainly could happen.

JUDGE STRICKLER: Thank you.

6 BY MR. MARKS:

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- And, Dr. Katz, just so that we have a clear record, in your last answer you used the -you referred to both floors and minimums.
 - A. Oh.
- If I could just ask you to clarify Q. whether you were talking about the same thing or different things?
- A. No, I apologize, as I -- as I said that. 15 I meant to say minimums, because I'll try to use the term "floor" to mean a minimum that applies just to mechanical. So I meant there to be talking about minimums that applied to the sum of mechanicals and performance.
- Q. And have you reached an opinion as to 21 whether or not it is economically reasonable to continue to have the mechanical-only floor in Subpart B?
- A. So as mentioned in the introduction, I 24 25 think it's reasonable to no longer have the floor.

1 to deal with. Music publishers have threatened and continue to threaten to withdraw from the PROs, and there have been issues about transparency and the possibility of fractional licenses.

25 they have emerged, so there's another PRO you have

Now, if you put all of that together, what it's saying is there's a threat that what's going to happen is you're going to have to go to more and more entities, so some combination of the 9 four PROs and plus publishers as they pull out, and 10 that all of those entities are going to end up being 11 must-have. Okay? They're going to be must-have for 12 a combination of -- well, they have, in many cases, 13 large portfolios of songs, and so as you've heard a 14 lot about in Web IV, that's going to matter to an interactive service because they need to offer their 15 customers a wide -- you know, a broad catalogue of 116 1.7 music. But then these issues of fractional licenses and issues of transparency then make -- make that 18 worse and make it more must-have because you can't 20 be sure you're not incurring all sorts of liability unless you go to all the parties. 21

Now, why is that a problem? Well, as you 22 23 start having more must-haves from whom you have to 24 license, each of them is going to have a degree of 25 monopoly power. So you're going to be paying more.

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1 And then also you can even run into this because 2 they're must-have, that they're complements. And so

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3 we're going to run into the Cournot complements 4 problem, which is to say that each one charges a

5 higher price, ignoring the fact that that may be 6 sort of suppressing what's happening in the industry 7 overall because you care about your share of what

goes on in the industry. 9

And, again, something we know, heard a 10 lot about in Web IV. And so this fragmentation 11 then, if it occurs, would be expected to lead to 12 higher prices, and we've seen a little bit of that 13 already with GMR now charging people, but that that 14 would lead to higher prices which then could 15 potentially trigger the floor -- and here I do mean 16 the floor -- because you'd end up -- as the 17 performance royalty rights go up, right, there's 18 going to be less and less left over for mechanicals. And so my concern is it's going to

19 20 trigger the floor. That will then have the effect 21 of raising the overall rate, the total amount you're 22 paying for the sum of performance and mechanical 23 royalties, and it will be raising it because of the 24 exercise of market power, not because music is 25 making a bigger contribution or anything like that.

THE WITNESS: -- collection agent. In 2 fact, goes straight to the writer, and so that is something that would be affected. 4 And that's something that if that's, you 5 know, an important change, then you would expect to 6 see the contracts change. But, yes, it is something 7 they would have to adjust. And that's something I've thought about. 9 JUDGE STRICKLER: When you say that was 10 something they would have to adjust --THE WITNESS: Meaning the --12 JUDGE STRICKLER: -- I don't understand 13 that. 14 THE WITNESS: That's a -- that was a 15 choice made by the songwriters and the publishers in terms of what they said was -- goes into the base of what's recoupable and not. Right? 18 JUDGE STRICKLER: But that's not really

19 before us. That is either a fact that there is that 20 recoupment process with regard to mechanical 21 royalties or there isn't. 22 And if it is there, isn't that an 23 economic value to the music publishers that they get

24 -- get to recoup some or all of their advances as 25 long as there's a mechanical royalty rate -- that

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1 flows through them, and the floor provides that it 2 won't disappear in the event of fragmentation, in

3 the event of withdrawals, or in the event of any 4 other reason that would cause the performance

5 royalty rate to go up? So if that's an -- assuming, 6 now -- I'm not saying it is, because there's a whole

7 lot more of this proceeding to go on -- but if

8 that's an economic basis in this case, why would --

9 and you seem to suggest that -- you're the one who 10 raised the point about advances, why is that not in

your analysis?

THE WITNESS: So, I mean, it is part of 13 my analysis in terms of thinking that they could -the publishers and the songwriters, if it's

important going forward for advances, to -- you 16 know, they're worried about recoupment, they could

write a contract, as far as I understand, that they

18 would -- could also recoup against performance

19 royalties, for example.

20 Now, I take the point that in existing 21 contracts, it would matter to them because those 22 contracts are there. But on a going forward basis,

23 in terms of thinking about what it means to the

24 performance -- the industry, they have alternatives, 25 contractual alternatives that would let them adjust

JUDGE STRICKLER: When you analyze --2 Dr. Katz, when you're analyzing the mechanical-only 3 floor, separate and apart from the issue that you 4 just described about the must-haves and the 5 fragmentation and the withdrawals, did you consider 6 whether there was any economic importance as to the 7 fact that the mechanical royalty flows through music 8 publishers and the performance royalty flows through 9 the performance rights organizations that you --10 that you just spoke of, and that each one might have 11 different contractual relations and rights and 12 duties with regard to songwriters and lyricists, the 13 artists, if you will, and that that was an important 14 economic factor that went into the bargain that 15 created the mechanical-only floor in the 2012 16 settlement that is your benchmark? 17 THE WITNESS: So I have thought about 18 that in the context of advances because my 19 understanding is that a common practice in the 20 industry is that when publishers give advances to 21 songwriters, that the advances, I think, are 22 recoupable -- I quess they're not -- in relevant 23 part not recoupable against performance royalties

24 that go straight from the PRO to the web --

JUDGE STRICKLER: Right.

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JUDGE STRICKLER: You're not aware of any 3 -- any restrictions that exist in the industry as to preventing that kind of a recoupment through the performance royalties as opposed to the mechanical royalties?

THE WITNESS: No, I'm not aware of that. I quess my experience is more as a textbook author, and there I think they had the right if they wanted to go after my house, but it may be -- it may be 11 that's something I'm not aware of in the music 12 industry, that songwriters are treated better than economics textbook writers.

JUDGE STRICKLER: Thank you.

15 BY MR. MARKS:

Dr. Katz, switching gears, you note in your written testimony that the fact that the 2012 17 settlement is relatively recent commends itself as a benchmark.

20 But have you looked at whether or not the music marketplace has changed significantly over the past five years?

- A. Yes, I have.
- 24 And what have you concluded about changes 25 in the marketplace since 2012?

If I could just ask you to walk us through your understanding of the various changes that have taken place in the industry since 2012 with reference to the prior periods? 5

A. All right. So what this slide is showing, to provide some context, is looking at overall industry revenue. So this is including revenues earned by record companies, for example, and streaming services. This is as calculated, the fine print will tell you, by RIAA.

And -- you know, and this is -- these are 12 figures for the U.S., but I should say the global figures are similar in terms of trends. And the reason I mention that and the relevance of that is 15 if you think about the returns to songwriting, 16 right, you're writing one song and it can be listened to or sold anywhere in the world, so the global trends are also relevant. And the global 18 trends are also relevant somewhat for streaming 19 20 services as well, to the extent that especially a 21 company like Spotify is multinational.

But, again, looking at the U.S., the 23 biggest trend, the one everyone is aware of is, 24 beginning in 1999, there was a significant decrease 25 in the revenues for U.S. music industry and that

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- Well, I mean, there have been significant 2 changes, what we might think of as big changes, 3 particularly, you know, between the rise of music 4 consumption and the rise of the importance of 5 streaming, but ultimately I've concluded that those changes do not point to a reason to either change the rate structure or the rate levels, that, again, subject to challenges, that the -- the industry is performing well under the -- the current settlement.
- Q. Did you consider expressly whether there 11 had been changes in the amount of music consumption 12 during the current rate period?
- A. Yes, that's certainly something I took 14 into consideration. And I think it's one of the 15 maybe few points where there's probably agreement among everybody in the room, that music consumption has increased.
- And should -- shouldn't Copyright Owners 19 receive additional compensation from interactive 20 services as a result of the increase of interactive 21 streaming?
- A. I think as a general matter, that they 22 23 should and, in fact, they have. The royalty 24 payments have gone up.
 - If we can go to the next slide, please.

1 that's attributed by people in the industry, by 2 academics, by the trade press, as being largely from 3 digitization, which allowed for the unbundling of albums, and unbundling turned out to be a bad way for the industry, and the bigger one, I think, though, everyone agrees, is piracy or unlicensed file sharing.

Okay. So that's a big trend. And one thing to note from that is that -- you know, that big decline, right, is not from streaming. 10 Streaming, you see, is -- in this light purple -just isn't showing up, and it doesn't even show up 13 in the RIAA figures in the early years. I think before 2005. Okay? 14

But streaming was not the cause of the problem. We see that streaming now is part of the 16 solution in terms of stabilizing industry revenues 17 because if we look in the more recent years, you can see that the decline slowed considerably and, in fact, in the most recent years, it has actually reversed. So -- but I don't want to make too much of it, of going up. I think the bottom line is that 22 23 it has stabilized things.

And then what has happened is that -- you 25 can think of intuitively is that streaming is

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1 replacing piracy, and that's a good thing for the 2 industry.

- Q. Have you reviewed any information that 4 speaks to how industry revenues are likely to change 5 going forward?
- A. Yes. I mean, the analyst reports I have 7 seen and, I guess, industry commentary suggest that 8 people do believe that this is a turnaround. It's 9 not just, though, you know, a one-time slowing but 10 that this is going to help stabilize the industry, 11 and that going forward, it can actually grow.
- Q. This slide is focused on changes in music 12 13 industry revenues, but have you looked specifically 14 at publisher revenues or profits over the 2012 to 15 2015 period? And I'll ask you just to answer that 16 yes or no, since we're in open session.
 - A. Yes.

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- 18 0. So that we can remain in open session, we 19 won't go into the details, but do you address those 20 topics in paragraphs 58 and 59 of your written 21 direct testimony?
- A. I'll assume you have the numbers correct, 22 23 yes.
- 24 Q. If I could ask, without turning to the 25 public display of the slide, but for people who have

2 from your written direct testimony, the industry 3 that you're referencing, is that the sound recording 4 industry or is that publishing industry or what? THE WITNESS: So I believe this is based 6 on, largely -- sorry. And there's a detailed 7 footnote in my report, but I'll give you my overall 8 understanding. It's primarily, I think, the retail

1 we still have up on the screen, which was figure 1

10 revenues. And when I say "primarily," if I 11 understand it correctly, for -- for non-interactive 12 ad+supported services that RIAA, I believe, uses 13 royalty revenues paid through SoundExchange, but in 14 mostly other cases what they're doing is they're 15 looking at the -- the consumer prices, the retail 16 value of music.

17 So embedded in that, then, would be, you 18 know, what everybody in the industry ends up 19 getting.

JUDGE STRICKLER: I asked about -- in 21 fact, looking at where it says sources in the

22 footnote, it says, now that I look at it, U.S. 23 recorded music revenue by format. So it's total --

24 total revenue in the industry, and it's in the next 25 chart that we're not seeing because it has

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1 paper copies, are the results of your analysis of 2 changes in publisher revenues summarized in the next 3 slide, which is restricted, in your slide deck?

- Have you given any consideration to the 0. 6 profitability of interactive streaming services or 7 lack thereof since the 2012 settlement was entered 8 into?
 - Α. Yes, I have.
 - Q. What have you concluded?
- 11 A. Well, I've concluded, I guess, a couple 12 things. One is that looking at Spotify's financial 13 statements and the level I'll talk about them is 14 public, that to date, they've been suffering losses, 15 and they are the largest, you know, stand-alone 16 service. And that also -- so they've been suffering 17 losses. They've shown a willingness to continue to 18 invest. So, clearly, they have some optimism that 19 the future will be different.

And then I've also observed that several 21 streaming services have gone out of business and, in 22 particular, have gone bankrupt are or were sold in 23 distress.

24 JUDGE STRICKLER: Just a question before 25 you go on, just for clarification. The slide that

1 confidential restricted material where you've 2 | limited the analysis or you've carved out publisher 3 revenue only?

THE WITNESS: That's right. And as I 5 say, the one thing I was saying and the footnote 6 goes on, there's some, I don't quite understand why 7 they've done it, quirk in the way that -- at least 8 looks to me like a quirk -- the way they deal with 9 certain advertising revenue for non-interactive

10 services. 11 JUDGE STRICKLER: Thank you.

12 BY MR. MARKS:

13 Q. If I could ask you to turn back to 14 Exhibit 885, which is your written direct testimony, 15 and turn your attention to footnote 76 on page 47. Is that the footnote to which you were 17 referring?

A. Yes.

19 Now, Dr. Eisenach and Dr. Rysman both 20 assert that the fact that there are firms entering the interactive space demonstrates that interactive 22 services must be earning economic profits.

Are you familiar with that testimony?

Broadly, yes.

: : JUDGE STRICKLER: Can you cite to a

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1 paragraph number from Dr. Eisenach's testimony? MR. MARKS: I don't have it, but I can supply that at the break. BY MR. MARKS:

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Q. How do you respond to that point?

So there are a couple of different A. things. First off, the fact that firms are entering doesn't imply that they're earning economic profits on a flow basis. In fact, that's a point I suspect you're going to hear from Dr. Rysman about considerably, that it -- but it does suggest that the firms are expecting that, overall, it will be profitable to enter. They might lose money now but 14 they expect eventually to make money.

It does tell us that, but I don't think 16 that tells us that they're earning excess profits or doesn't say anything or imply that the royalty rates are too low.

I mean, you could have -- for example, you could have entry into an industry, even though 21 one of the suppliers to that industry had a monopoly. I just think they're trying to draw too tight a link between entry and the nature of the input prices.

And then the other thing I would say is,

1 anything other than vigorous at this point.

- Q. In the interest of time, we'll skip over 3 the details, but are the bases for your conclusions in these regards set forth in paragraphs 60 and 61 of your written direct testimony?
 - Again, I will assume you have the right A. numbers.
 - What is the relevance of the increases in 0. the numbers of musical works and songwriters to your assessment of the probative value of the 2012 settlement as a benchmark for rate setting here?
- Well, I was -- I was looking at those because I was looking for evidence that the market 13 was not functioning well under the 2012 settlement, 14 either because you'd see investment in streaming services cease or that you would see the production of musical works cease. 17

And I didn't see evidence of either of those things.

Q. And if we could skip slide 11 and go straight to slide 12. Thank you.

Can you give us your overall assessment of the industry changes and whether they counsel in favor of rate increases for the 2018 to 2022 period?

A. All right. And maybe what I will do,

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1 well, yes, there has been entry and clearly there 2 are firms that are optimistic about their prospects 3 of streaming services. There has also been exit. And seeing entry and exit is all consistent with having a -- the functioning of a competitive market. And I don't think it by itself is indicative of there being excess profits or economic profits.

- Have you given any consideration to how the numbers of songwriters and musical works has changed since the 2012 settlement was entered into?
 - A. Yes, that's something I considered.
 - What did you conclude?
- 113 So I conclude from the data that are 114 Α. available to me is that there continue to be, you know, many people as songwriters. I looked at the memberships, I guess, in ASCAP, and BMI and then, I guess, as recently provided through interrogatories 19 membership in another organization for songwriters. 20 But overall that those organizations collectively 21 are growing and that also the numbers of songs that 22 are -- ASCAP and BMI have grown very substantially 23 in the last few years. And just generally have 24 found an absence of -- of any evidence that the 25 supply of music has become diminished and that it's

1 when we get -- have the slides, just touch on a few 2 of these things, but in terms of, you know, maximize availability, we see that, as I say -- and I guess at broad level, I mean, it's from their public statements, so the publishers are profitable, certainly the leading ones are because you can see that in their public financial statements. So it's not confidential.

As we've said, music revenues have 10 stabilized. And the Services are unprofitable. Now, you know, as -- I take from that that, again, the Services are unprofitable, but they're still continuing to invest. As I said, the status quo is 13 sustainable. But it suggests that anything you'd want to do is you would want to -- sorry, I thought 15 I made a typo. I didn't see the 9 there. If 17 anything, it suggests you'd have lower rates or continuing the current rates, but it doesn't -- it 18 certainly doesn't suggest that we need to raise rates in order to improve availability, that we see both sides doing what they need to do to make the music available to consumers. 22

23 In terms of the fair return and fair 24 income and also let me say on the -- on the relative 25 roles, you know, one of the things, I think, you're

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OPEN SESSION 6201 641 1 going to be hearing a lot about is saying, well, OPEN SESSION 2 streaming has become much more important since 2012. CROSS-EXAMINATION 3 It's a much bigger deal. And that's clearly right. 3 BY MR. JANOWITZ: 4 I mean, it is a bigger deal. And I think, if Q. Good morning, Dr. Katz. 5 anything, that would argue for saying that its role A. Good morning, counsel. 6 has become more important since 2012 and that could Q. | I'm going to ask you some questions about actually argue for why streaming services should get 7 your -- your benchmark analysis, in particular, the 8 more of the surplusage, if they have lower 8 2012 settlement. Now, I understand that you feel a 9 royalties. 9 benchmark analysis is helpful because it avoids So, again, as you walk through each of 10 having to build up a model, correct? 11 these, I think where they come out is it suggests 11 A. Yeah, certainly it avoids having to build 12 that either you keep the rates the same or I think 12 a ground-up structural model of the industry. 13 generally suggests that the rates could be lowered, 13 Q. Exactly. 14 if you apply all of them. Again, I won't walk A. Yeah. 14 15 through every single one. That's the bottom line 15 Q. | So -- so we're avoiding that kind of 16 conclusion. 16 ground-up, you know, structure. And are there other 17 17 ways that you could do that? Are there other kinds MR. MARKS: At this point, Your Honors, I 18 have a short series of questions that will get into of analyses that you could use that would not 19 restricted information and require clearing the 19 involve building a model from the ground up? 20 courtroom. 20 A. You're saying aside from benchmarks? 21 JUDGE BARNETT: Okay. We're going to 21 Q. | Exactly. | 22 take our morning recess at this time, 15 minutes, 22 A. I'm not sure. I mean, if you use that 23 and when we reconvene, if there is anyone here in 23 term expansively enough, it may cover everything. I 24 the courtroom who is not privy to confidential 24 mean, you could certainly have different ways of 25 information, if you will please wait outside the 25 building models. People try to build up from costs. 621 642 1 hearing room, we'll invite you in when this 1 You might actually try to have a model of the whole 2 restricted material is completed. 2 industry and the demand for services and everything (A recess was taken at 10:50 a.m., after 3 else. So, I mean, when I say building a model, it 3 which the hearing resumed at 11:12 a.m.) 4 could mean a lot of things. 5 (Whereupon, the trial proceeded in 5 Q. I understand. Well, let me give you an confidential session.) 6 example. For example, some of the experts have used 7 Shapley values. Is that a way of getting at some of 8 8 these issues without having to build a model from 9 9 the ground up? 10 10 A. I would say actually those are models of 11 11 the industry. They are highly stylized. And it's 12 12 something I, you know, talk about in my written 13 13 rebuttal report, but they are -- those are modeling 14 14 the industry. 15 15 Okay. So you look at it that way. 16 16 JUDGE BARNETT: Forgive the interruption. 17 17 I don't think we got your name on the record --MR. JANOWITZ: Oh, I'm sorry. 18 19 JUDGE BARNETT: -- in connection with 19 20 20 this cross-examination. 21 MR. JANOWITZ: Of course. James 21 22 22 A. Janowitz for the Copyright Owners. 23 23 JUDGE BARNETT: Thank you. 24 24 MR. JANOWITZ: I'm with Pryor Cashman 25 25 LLP.

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1 BY MR. JANOWITZ:
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- O. And you testified earlier that -- and I 3 think you were addressing Dr. Eisenach's report, 4 that prior settlement may not be perfect, but in 5 this case judged against the performance of the industry, which is healthy, you think that prior settlement is a valid benchmark? Is that correct?
- A. Yeah. I guess -- and I'm not sure of the 8 exact words I used. I would say in some sense healthy enough. There are clearly challenges for the industry, but -- and, you know, for streaming, things that -- that better change for them at some point, but I think it's on a trajectory that's sustainable. 14
- 15 Okay. So it's not healthy; it's healthy 16 enough?
- 17 Yeah. Α.

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- Would be accurate? 0.
 - You could say that. Α.
- 20 Okay. Q.

21 JUDGE STRICKLER: Could I ask you,

healthy enough for what?

23 THE WITNESS: That it's sustainable, that 24 I believe -- and certainly investors believe that

25 the situation in streaming at some point will change

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1 shakeout so that competition will become less intense.

JUDGE BARNETT: So they're taking a loss but they're going to make up for it in volume, is 4 that it?

THE WITNESS: You and I may have similar investment strategies. Yeah, I mean, it sometimes looks like that could be what the -- the risk is. But clearly they're expecting something to change in the future.

JUDGE STRICKLER: When you say they may -- they may also anticipate that there's a shakeout in the competition, does that suggest that there's also a competition for the market, various type of competition, as well as this kind of competition on the basis of price and differentiated product?

THE WITNESS: So that's not something that I've done a full analysis of, but I would say off the top of my head that I $\operatorname{--}$ I would say that there are network effects present here, but there's also significant product differentiation across 22 services, so that I would think this is an industry where we would expect multiple streaming services to 24 survive, and so it could be that there are fewer

1 expect. I would -- I wouldn't expect it to tip to a

25 than we see now, but that it's something I would

1 so that they'll become profitable on a flow basis. And clearly the industry, and this is 3 both the Copyright Owners and streaming services, continually have to deal with the -- the threat of piracy.

So I just mean factors like that, that there's still -- they face headwinds. 7

JUDGE STRICKLER: Well, if -- if the rates are -- allow them to be healthy enough where they will become profitable, why aren't they profitable now? How would one know what's going to change if the rate stays the same and they'll go from not profitable to profitable?

THE WITNESS: So I think that the Services are banking on or their investment -investors are banking on is thinking that there's -part of it is that they'll benefit from economies of scale at some point.

And, I mean, again, as I say, I have to speak to expectations of the investors. Personally, I'm probably not as optimistic as their investors are, but that's what I think has to be their biggest hope, that they -- some combination of they'll 24 benefit from economies of scale at some point and

25 also that there may be an additional industry

monopoly.

But there would still be elements of what 3 you're saying, but I don't think it would go all the way to do that. I think there's enough differentiation.

JUDGE STRICKLER: Thank you.

BY MR. JANOWITZ:

- Dr. Katz, you're looking to some point in the future where the industry may become profitable; is that right? That it becomes more healthy?
- A. Well, I'm saying that appears to be the expectation of industry participants who have chosen 14 to enter, that they think it will become more profitable.
 - Q. Right. So -- so entry is a token of optimism with respect to the economics of the industry?
 - Yeah, at a broad level, yes. Α.
 - And do you expect -- do you think that -that optimism is based on any analysis or is it just, you know, Panglossian optimism?
- 23 A. My experience with a lot of industries would suggest it's a combination of both, but I 25 would certainly hope some people have done analysis.

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And have you done an analysis?

- Of the future of the industry? Α.
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- A. In terms of my own from the ground up, 5 no, I've, you know, read some financial projections and things like that, but I have not constructed my 7 own prediction of the industry.
- Q. Now, with respect to the -- let's take 9 the existing rate, because you think that the rate 10 should be lower, if anything. With respect to the 11 existing rate, have you done any analysis of the 12 impact of that rate on the profitability of one or 13 any of the Services?
- A. I have not conducted such an analysis 15 myself. You know, Pandora -- as Pandora witnesses 16 have testified to that in writing. I've reviewed 17 that, but I haven't conducted my own studies.
- Q. And so you don't know whether it affects 19 -- whether it delays profitability or eliminates the 20 possibility of profitability yourself?
- A. I mean -- I mean, no, I think as a matter 22 of arithmetic that it would reduce it and delay it, 23 but I couldn't quantify the amounts.
- Q. And you can't -- and you can't quantify 25 the impact on the survival of any of the streaming

- Q. And you testified earlier that the parties have agreed that the 2012 settlement works for them. Do you remember saying that?
- A. I don't remember. Well, I mean, they -certainly at the time they reached the settlement, they agreed to the settlement. 1 1 1 1
- 7 Q. That's kind of my point. But I think the -- I think the point you were trying to make was 9 that we have some confidence in that settlement 10 because the parties have agreed that it works for 11 them. Or perhaps I misunderstand your testimony and 12 it's not that the parties have agreed that it works for them.
- 14 A. So -- well, let me state it now because 15 I'm not completely recalling which thing you're 16 referring to. So at the time they reached the agreement, I mean, it was a voluntary agreement, so that in that sense in which it works for them, and then my statement about how the industry has performed since then was based on an observation of 21 what's happening.
- : I -- if I said that -- or what I seemed 23 to say was everybody is happy with how things are 24 going, there are certainly songwriters who complain

25 a lot about streaming, but what my analysis was

1 services, correct?

- A. That's correct. That's something that I 3 would leave to the fact witnesses for the streaming 4 services.
- 0. Okay. And in terms of the -- the lower 6 rate, assuming that the rate that you -- that your 7 client is suggesting be adopted, do you have any 8 idea how that would impact the profitability of any 9 of the Services?
- A. Other than your point saying a lower rate 11 would generally improve the profitability, either 12 making it less negative or more positive, but, 13 again, I haven't done a quantitative assessment of 14 that.
- 15 Q. And so you haven't done a sensitivity 16 analysis, either, as between what Services are 17 proposing versus what exists versus what the 18 Copyright Owners are proposing, correct?
 - A. Sensitivity with respect to --
- Q. Their -- their individual impacts 21 relative -- and relative to each other on the 22 profitability and sustainability of the industry.
- 23 A. That's correct, beyond what's in my 24 report which, again, citing other sources of doing 25 it, but I have not done a direct analysis myself.

1 based on is not whether there are anecdotes of 2 songwriters complaining but to look at how the 3 industry is performing.

So if I said something about works at 5 that point, I was talking about broader measures of 6 industry performance, and I don't recall saying it, 7 but I didn't mean to be implying that necessarily 8 every individual is happy with how the 2012 9 settlement has gone. Clearly, Copyright Owners 10 would like something different. That's why you're 11 here.

- Q. Precisely. And in terms of -- and in 13 terms of, you know, the comment about how it works for them, so now you're saying you were referring to 15 the 2012 agreement at the time that it was entered 16 into?
- 17 No, what I'm saying is I don't recall the 18 testimony you're quoting, so I was trying to just 19 put on the record so we can have the discussion that 20 at the time they reached the agreement, clearly both 21 sides thought it worked for them. That's -- it's a 22 voluntary agreement. And then I'm also saying that subsequent to that, when we look at industry performance, I think the performance shows that the 24

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I don't recall saying at any point that people -- that necessarily the Copyright Owners were happy with it. If I did, I misspoke because, as I said, I realize we're here because you'd like something different.

- Right. And in terms of what was going on 0. in 2012, again, it's not necessarily that they thought it worked for them, that it worked for them, but perhaps they hoped or expected that it would work for them in the future because at the time that they agreed to the 2012 settlement, they had no idea how it would work in the future; isn't that right?
- I'd be pretty surprised if they had no 13 14 idea --
- Well, I'll take a step back. They didn't 16 know how it would work in the future, correct? There was no crystal ball at the takeoff?
 - A. I would assume that that is correct, that there was no crystal ball.
- Q. And so looking at the factors that you 20 were taking into account in relying on the 2012 settlement, let's just go through them.
- 23 One, that it was a relatively recent 24 negotiation, correct?
 - A. Correct.

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1 might occur?

- A. That is what I say.
- Okay. And you say that there were no significant asymmetries between the parties' ability to litigate. I understand that. And that there was no exertion of market power by one party on the other.

I'd like to ask you about other factors that might affect whether the 2012 --

- One thing --
- Go ahead. 0.
- When you said no exertion of market Α. power, whether you're quoting something or is that --
- I'm -- I may not -- I don't have quotation marks in my notes, but as best as I can remember, that's what you said. If you have --
- A. I just don't remember talking about 19 exerting market power. Certainly, it says that I didn't see -- I mean, if you look at my written testimony, I believe it says that I didn't see an imbalance of bargaining power or market power that favored the Services, because I was trying to take a 24 conservative approach.

And in my testimony orally earlier today,

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- Q. And I notice you say "relatively." So it 2 is four years. And this is a -- this is an industry in which things happen pretty quickly, isn't it?
 - A. Certain people have a perception of that. I mean, there are certainly people who characterize it that way.
 - You disagree things happen quickly in Q. this industry?
- A. My view actually, and a view I've had for a lot of years, is that people talk about things happening in the Internet time and -- and network effects and everything else, and there tends to be 13 an exaggeration with how -- how quickly things happen, but I will agree that lots of people characterize it that way.
 - Q. Okay. And you also rely on the fact that these are similar or the same parties, which --
 - A. That's correct.
 - Q. -- which I understand, and that they were negotiating over an identical set of rights?
 - A. That's my understanding.
- Right. So this is -- that was a 115 22 proceeding, settlement. This is a 115 proceeding. The parties knew that the alternative to settling 25 was that the CRB proceeding under the 801 standard

1 I believe I said that -- that things were roughly balanced and I didn't see it that way.

So --

- Q. Okay.
- A. It just struck me because that's not something I recall having said it that way.
- Q. That's okay. I may not have remembered it precisely myself.

So let me ask you, in addition to the 10 things you've mentioned, what if the economics or business circumstances relating to streaming changed 11 12 materially between 2012 and now? Is that something that would affect the 2012 settlement as a 14 benchmark?

- It would depend on how it would change.
- Of course. But possibly those kinds of economic or business environment changes might affect whether or not the benchmark is appropriate, correct?
 - Α.
- What if one or more of the parties to the 0. 22 2012 settlement based its -- its decision in entering into that settlement on materially faulty or incomplete information? Could that affect the 24 usefulness of the benchmark? 25

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Potentially, it could. Again, part of it 2 is even if people went in with the wrong 3 expectations, that it turns out that the benchmark 4 is performing well and meeting the statutory 5 factors, it could still be okay. So I -- I think 6 you could imagine situations where people's beliefs 7 were so far off they did things that turned out to 8 work really badly, but you can also imagine situations where people's beliefs were off but it 10 nonetheless worked well.

- 11 Q. Sure. It could fall into the category of 12 dumb luck, right?
 - That's a possibility. Α.
- Okay. What about the -- the shadow of 14 15 the compulsory license? Page 54 of your statement, 16 and this may jog more with your recollection.
- A. You're asking my written direct 17 18 testimony?
 - Q. Your written direct, yes. As long as --
 - I'm sorry, could you tell me ---
- 21 0. Please go ahead. 22
 - -- where it is? Α.
- 23 0. Page 54.

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24 No, I'm saying starting -- if you could A. 25 tell me where in my binder where is my testimony.

THE WITNESS: Yeah. Okay. You want me 2 to look at our binder, not yours? 3 BY MR. JANOWITZ:

4 | | | | | Q. | | Yes. | | | | |

- A. Okay. I'm sorry, if you could then tell me the page number again, please.
- | | O. | Page 54. | | | 7 A. I'm there. 8
- Q. Okay. Before we get to that, just 10 talking about the nature of the information that the 11 Copyright Owners had, wasn't it also part of the 12 agreement in 2012 that the rates would be determined 13 de novo in this proceeding, should it occur?
- A. That's my understanding from what I've 14 15 read by -+ statements of one or more of your expert 16 witnesses, and I may have gone back and looked at 17 the language, but, yes, roughly, that's my 18 understanding.
- 19 Q. So -- and so the Copyright Owners might 20 have relied on that term in agreeing to the other 21 terms in the settlement, correct?
- 22 A. Yes.
- Q. And so the -- the possibility of 23 24 correcting mistakes to the extent that they were 25 made in five years could -- could very well have

0. Oh.

- Am I 883? Α.
- Q. Let's see.
- A. It's not labeled. These are labeled by 4 5 trial exhibit names, not by --
- JUDGE BARNETT: 885, I think, is your 6 7 testimony.
- 8 THE WITNESS: I'm not sure that I --JUDGE BARNETT: You might have to look at 9 10 the other binder.
- THE WITNESS: Yeah, I don't think you 12 gave me that. Okay.

13 BY MR. JANOWITZ:

- Q. It's -- it's tab 1.
- 15 A. Mine is -- my first tab is Google trial 16 Exhibit 695, testimony of Greg Leonard.
- 17 Q. I think you're looking at perhaps -- take 18 a look at the other binder you have.
- JUDGE BARNETT: The smaller binder? 19 20 THE WITNESS: This is -- this is the only 21 binder you gave me. This is the binder from this 22 morning.
- 23 MR. JANOWITZ: All right.
- 24 JUDGE BARNETT: Right. That's the one
- 25 that has your testimony.

- 1 been something that was important to the Copyright
- 2 Owners in entering into that settlement, correct?
- A. I would -- I would think actually that 4 both sides would be interested in having the ability to correct what they saw to be mistakes.
- Q. I agree with you. So now looking at page 7 54, you say that "as long as neither party has
- 8 excessive market power or benefits from a
- 9 governmental policy that 'tips the scales in its
- 10 favor, 'economic principles of bargaining indicate
- 11 that negotiated settlements will reflect relative 12 contributions." Correct?
 - A. Yes, that's what it says.
- Q. Now, the compulsory statutory rate, the 15 shadow of the -- of the rate as we refer to it, is the embodiment of a governmental policy, isn't it?
- 17 A. Yes.
- 18 Q. Okay. And so it would fit into this 19 analysis of whether there is a governmental policy 20 that tips the scales. And -- and the compulsory
- 21 rate has an impact on bargaining between the
- 22 publishers and the Services, doesn't it, when they
- 23 bargained with one another?
- 24 A. Yes, as I talked about earlier this 25 morning during my oral direct, I think it serves as

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1 a backstop, and so people take it -- would take it into account as part of bargaining what their alternatives are.

Right. Interesting that you mention that.

So you did, you testified to the fact that it was a backstop, and just before that, I think you said that the way it works is that if a party is getting a really bad deal, it can go to the CRB. Correct? Do you remember saying that?

- A. Something to that effect, yes.
- So that it would seem that the -- the 13 impact, the protective impact of the shadow is -- is limited; in other words, the way you're describing 15 it, you need a really bad deal to get there?
 - A. No, that --

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- To take advantage of the fact that Q. there's a compulsory and that there's a proceeding looming?
- No, I didn't say that. There's a 21 difference between saying if you thought you were going a really bad deal, you would do something, and saying you would only do something if you thought you were getting a really bad deal.
 - Well, can you determine at what point in

Q. So going back to your statement about, you know, the factors that affect using a benchmark, isn't it true that in this case in 2012, given the nature of the compulsory, given the nature of the shadow, given the fact that it is an expression of governmental policy, weren't the scales tipped against the publishers?

A. No, I don't believe so. As I said, my opinion is that it -- well, let's be careful. If you're saying did it tip it against them in the sense that absent the intervention, if they -- had they done things individually, they could take -take advantage of having monopoly power, in that 13 sense you could say it tips, but as I was using the 14 term here -- and maybe I shouldn't use terms when I 15 put them in quotation marks because it shows they're too loose and that's why I put them in quotation marks.

I think of the shadow as balancing the bargaining power between the two parties.

- Q. I understand that. And so my -- but my 21 question is does it balance it perfectly? 22
 - A. You shouldn't ask me that in front of the judges, but, now, look, there's -- they're human and there's no reason to believe that it will be

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1 getting a bad deal, you know, it would affect your 2 ability to negotiate, not just a really bad deal, 3 it's a fairly bad deal, or how does it work?

- A. You would have -- the party involved would have to make the calculation of saying what's on the table as a potential private settlement and agreement and form expectations about what would 8 happen in a proceeding, look at the difference in the expected values of those outcomes, and also take into account bargaining costs, both in the private 11 negotiations and potentially in the statutory proceeding.
 - So it would be a very complicated Q. analysis?
- It could be complicated. You might -some people would do that in a simple way. It would 16 be up to the person conducting the analysis.
 - But if you were going to do it rigorously with the hope that you would get it right, it would be very complicated, correct?
- I'm not so sure. But if it -- I mean, Α. 22 it's a small number of numbers involved. It would 23 depend on how people did it. I mean -- it would depend -- it would depend on how the particular company formed its expectations.

1 perfect, and even if they are perfect, it's not 2 clear that that would be recognized by the parties. 3 So as I said before, I mean, this is a matter of people's expectations. And it's not going to be 5 exact.

Q. But you can't -- you can't measure the offsetting effect of the shadow of the compulsory against what you consider to be market power on the part of the Copyright Owners, can you?

JUDGE STRICKLER: Counsel, can you clarify in your question when you say the shadow, are you referring to the shadow of the compulsory license that exists or the shadow of the compulsory license that might exist if there's no deal or something else?

MR. JANOWITZ: I am -- it's the latter, Your Honor.

118 JUDGE STRICKLER: Thank you. 19 THE WITNESS: I'm sorry, if you could

just repeat your question. MR. JANOWITZ: Could you, please?

THE REPORTER: "Question: You can't measure the offsetting effect of the shadow of the compulsory against what you consider to be market 25 power on the part of the Copyright Owners, can you?"

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THE WITNESS: I'm not sure what you mean
by "measure" or even whether I think, there would
be a need to do the measurement in order to reach
the conclusions I have because let's and I
realize you don't accept this, but take as
hypothetical that, in fact, it does perfectly
balance and perfectly offset market power.

That would be sufficient information for 9 me, regardless of whether I knew how much market 10 power was offsetting, so there would be no need to 11 measure it.

12 BY MR. JANOWITZ:

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- 13 Q. Right. But you don't know whether it 14 perfectly balances, correct?
- 15 A. As I said, my expectation is that it's 16 not perfect because, you know, as people are 17 imperfect, but it's the best we have got.
- 18 Q. So it could -- it could, in fact, tip the 19 scales against the publishers, correct, net, the net 20 outcome?
- A. The publishers could -- I mean it's 22 certainly possible publishers could have believed 23 that.
- 24 Q. Right. And so that could have affected 25 their negotiating, correct?

- You don't know? How about iHeartRadio?
 - A. I don't believe so.
- 3 Q. Now, Spotify launched in the U.S. in 4 2011, but I think they weren't really too effective 5 until 2012. Did they participate?
- A. My recollection is they did not, but I'm 7 not sure.
 - Okay. How about Google Play Music?
- That one, sorry, I just can't do from Α. 10 memory because I think not Google Play, but I can't 11 remember whether Google -- I thought Google was 12 involved, but I may -- I just -- I mean, I'd have to 13 · look.
 - Q. You don't know?
- 15 | A. | Yeah, I don't know.
- 16 Q. Sitting here. Amazon Prime launched in 17 2014, so it's fair to assume they were not a participant, correct?
- A. If by "they" you mean the specific Prime 20 service, yes. If you're asking about Amazon 21 | broadly, I don't know. I don't recall their being 22 part of it, but I don't know as I sit here.
- 23 Q. Okay. And TIDAL wasn't launched until 24 2014, so presumably they were not a participant?
 - A. I believe that is so, given it's a narrow

- Q. And you don't know whether that was 3 something that did, in fact, affect their negotiating?
- 5 A. Well, I would expect that their beliefs 6 about what would happen -- as an economist, my 7 expectation would be that their beliefs about what 8 would happen if there was a proceeding would affect 9 their decisions.
- 10 Q. Of course, but you don't know whether 11 they perceived a disadvantage, a tilting against 12 them at the time that went into their thinking about 13 how they should settle that 2012 proceeding?
- 14 A. Yes, and I just -- I just want to be 15 clear about one thing. When you say about how they 16 perceived a tilt, what they would consider a tilt 17 and what I consider a tilt as an economist might be 18 different things. But -- but certainly, if you're 19 just asking did their perceptions of what would 20 happen in the proceeding affect their bargaining 21 position, the answer is yes.
- Q. Okay. And so let's -- let's take a look 23 at who the participants were. Was Pandora a 24 participant in the 2012 settlement? 25
 - A. I -- I don't believe so.

- 1 company.
- 2 Q. And Apple Music, the streaming service, I 3 believe was 2015. So it's fair to -- to assume they 4 were not a participant, correct?
- 5 . . A. Again, if you're referring specifically 6 to the streaming service, correct. I don't know if 7 Apple -- I don't recall, as I sit here, if Apple was 8 involved in some other way. It's a multi-service
- 11 to this settlement which related only to streaming, 12 probably not, correct?
- 13 A. Yeah, look, if you represent to me that 14 they weren't involved, I have no reason to doubt 15 you. But I don't remember as I sit here.
- 16 Q. All right. And -- and you did consider, 17 didn't you, whether the entry of all of these 18 companies responsible for the vast amount of 19 streaming after 2012 affected the suitability of 20 this benchmark?
 - A. Yes.
- 22 Q. That's something you took into account, 23 didn't you?
- 24 A. Yes.
 - Q. But, ultimately, you decided to ignore

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that fact, correct? False. Α. 3 Okay. Tell me -- tell me how it's false. Q. I mean, I didn't ignore it. Wait --4 5 Well, I'm not saying that you ignored it. Q. Yes, you did, that is what you said. 6 A.

- No, let me -- let me rephrase it. I'm 7 not saying that you didn't consider the issue. But 8 my question is, ultimately, did you conclude that the entry of these companies after 2012 was something that affected the suitability of the benchmark? 12
 - A. Yes.

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- Q. You did conclude that?
 - A. Yes.
- 16 Q. Okay. Tell me how it affected the 17 suitability of the benchmark in your analysis.
- A. It was part of my analysis that indicated that the industry was optimistic that given the -the current structure and their views about going forth -- and here by industry, I mean the streaming 22 services -- that the market was functioning on that side and that we were seeing sufficient investment. 24 And so it was one of the indicators to me that the 25 2012 settlement was working.

1 And I think you said that you did.

- That's correct. A.
- Okav. So --

JUDGE STRICKLER: I'm sorry. I don't 4 want to cut off your flow. Do you have another question on this?

BY MR. JANOWITZ:

- 0. So I'm just trying -- but it was my understanding, reading your report, that having 9 considered it, you rejected it as something that 10 affected the suitability of the 2012 benchmark.
 - A.
 - That's where we seem to be --0.
- A. No, I rejected it as a reason to conclude 15 that you should raise the rates.
 - Q. Okay.
- I didn't reject it as something to take A. into account. 18

JUDGE STRICKLER: A question as it relates to the entry and the particular entry that 21 we've seen as represented by some of the parties 23 here who were not parties to the 2012 settlement. 24 And I'm speaking particularly of -- of Apple and 25 Amazon and Google. And tying it back to your

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- Q. So are you telling -- are you telling us that the participants to the settlement in 2012 3 foresaw this entry?
 - A. I haven't offered an opinion on whether they foresaw the specific entry or not.
- Q. So then how did it affect their 6 7 bargaining?
 - A. I wasn't --
 - Q. Sorry.
- Are you asking me differently? Because I 10 -- I want to make sure I didn't misunderstand your 12 question.

I thought you had asked me how the entry affected or if it did affect my assessment of the 2012 settlement as a benchmark, and I was answering that question.

And I'm wondering if I misunderstood your question because you seem to be asking something 19 different.

- Q. Perhaps. What I'm trying to get at is you -- you take the 2012 settlement as a suitable benchmark. There were many companies that entered into the business after 2012 that didn't participate 24 in the 2012 settlement.
 - I asked you whether you considered that.

1 testimony on direct, Dr. Katz, where you talked 2 about the problem of defining revenue, the need, 3 therefore, for a per-subscriber floor.

In your analysis, did you consider whether the nature of the businesses, of the three entities that have subsequently gotten into streaming in the manner they are now, created an 8 issue that you needed to consider about defining 9 revenue that did not exist at the time of the 2012 10 settlement?

THE WITNESS: So I did not think -- yeah, 11 I didn't think of it as an issue that didn't exist 13 at the time of the 2012 settlement, but I thought of 14 it as an issue that the parties addressed with the 15 minimums and measurement -- I just -- or the definition of revenues, took to an issue the whole time, so I didn't think of that as a brand-new 17 18 issue.

119 JUDGE STRICKLER: Even though you didn't 20 think of it as a brand-new issue, did you consider whether or not the minimum needed to be changed, not the definition of the minimum, but the value of the 23 minimum or the percentage of revenue rate needed to 24 be changed or anything else within the structure 25 itself needed to be changed in light of the fact you

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                                                          1 term of art.
 1 had -- that we had new entities in the marketplace
 2 that have what has been colloquially called
                                                          2 Q. I'm sorry, interactive service providers.
 3 ecosystems beyond simply the system of streaming of
                                                          3 I misspoke.
                                                                  A. Okay. Now, as I sit here, I couldn't
              THE WITNESS: No, the level at which I
                                                          5 point to articles specifically about interactive
 6 did my analysis was to take the structure of the
                                                            services.
 7 2012 settlement and ask how is the industry
                                                                   Q. Can you think -- without having the
 8 performing under that structure, and I didn't
                                                          8 citation, can you think of one that stands out?
 9 conduct a separate -- and then concluded that it was
                                                                   A. No, I'm saying I can't think of one.
10 performing satisfactorily and then -- and subject to
                                                                   Q. Okay. Can you -- can you point to
                                                         10
11 the one modification, that it made sense to retain
                                                         11 anything else that -- that would demonstrate that
12 it, but I did not do an analysis of asking what
                                                         12 this issue of measurement of complementary goods and
13 would happen if you adjusted specific rates. It was
                                                         13 services was something that was in front of the
14 a more global analysis of the overall package.
                                                         14 participants to the 2012 settlement?
15
              So I have -- I have not conducted an
                                                         15 A. As I sit here, I can't.
16 economic analysis, say, for one of the particular
                                                                   O. Okav.
                                                         16
17 products, should the minimum be increased.
                                                         17
                                                                       JUDGE BARNETT: Is this a good place for
18
              JUDGE STRICKLER: Thank you.
                                                         18 us to break?
19 BY MR. JANOWITZ:
                                                                       MR. JANOWITZ: Sure.
                                                         20 | | JUDGE BARNETT: All right. We will be at
20
         Q. Dr. Katz, just following along on that
21 and trying to understand the mind-set of what the
                                                         21 recess until 12:04 on that clock.
22 participants in the settlement were thinking, do you
                                                                       MR. JANOWITZ: Oh, yes, my goodness. I
23 believe that the Copyright Owners were in a position
                                                         23 -- I thought it was going to be a very long day,
24 to understand the nature of the ecosystems, as Judge
25 Strickler refers to them and many other people as
                                                                       JUDGE BARNETT: Well, it still might.
                                                      672
                                                                                                               674
 1 well, that -- what the impact of those ecosystems
                                                          1 We'll probably have to keep it light. 12:04 on that
 2 and the complementary goods and services that the
                                                          2 clock.
 3 companies entering the field would employ?
                                                                        (Whereupon, at 12:10 p.m., a lunch recess
         A. I can't speak to the specific
 4
                                                          4 was taken.)
 5 individuals. I certainly know there are plenty of
 6 people who would have thought of those things, and
 7 talked to, you know, my colleagues who work on some
 8 of these issues and network effects. And,
                                                          8
 9 certainly, the issues of ecosystems and platforms,
                                                          9
10 it has been one of the -- maybe the leading object
                                                         10
11 of study in industrial organization, and it has
                                                         11
12 certainly been a topic within many of the Internet
                                                         12
13 industries.
                                                         113
14
              So, again, I can't speak to the
                                                         114
                                                         15
15 individuals, but the issues of ecosystems and how
16 the things fit together has been one of the big
17 developments in U.S. and global business of the last
                                                         17
18 decade.
                                                         18
19
         Q. And -- and are you aware of any studies
                                                         19
20 or articles that were written specifically with
                                                         20
                                                         21
21 respect to the use of complementary goods by
22 service -- by Internet service providers prior to
                                                         22
23 2012?
                                                         23
24
         A. I'm sorry, you're asking -- you're using
                                                         24
25 the term "Internet service provider," which is a
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25 cross-examining?

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                                                        675
                                                                          MR. JANOWITZ: Yes. Thank you, Your
         AFTERNOON
                              SESSION
 2
                                     (1:12 p.m.)
                                                               Honor.
                                                                          JUDGE BARNETT: The courtroom -- the
 3
               JUDGE BARNETT: Please be seated.
                                                               hearing room is open, so if you get to restricted,
               Because over the weekend -- I don't know
 4
 5 this, maybe I shouldn't make it a cause and
                                                               just let us know.
   effect -- over the weekend I began sending out
                                                            6
                                                                          MR. JANOWITZ: I will. I will do my
   missives to ask about no closures, and so over the
                                                            7
                                                               best, anyway.
    lunch hour I was woodshedded, sort of, to be told
                                                               BY MR. JANOWITZ:
                                                                     Q. Good afternoon, Dr. Katz.
    that if the building is closed, we can't come in, it
                                                            9
                                                                     A. Good afternoon.
10 is closed. That much we knew.
                                                            10
                                                                          Dr. Katz, I want to continue talking
              There are some other permutations. There
                                                           111
                                                           12 about the 2012 settlement. And I'd like to focus
12 is something called liberal leave, which means
                                                               right now on the calculation for standalone portable
   anybody who can't get in can take unscheduled leave
                                                            13
                                                               subscriptions, mixed use.
   and anybody who can telework, can have unscheduled
                                                           15
                                                                          Are you familiar with that calculation?
15 telework.
                                                                          It depends on what you mean by "familiar
                                                           16
16
               There are two kinds of late. There is a
   late opening, which is when the building opens late,
                                                               with the calculation." Are you asking could I
17
                                                           17
                                                               recite the numbers off the top of my head? No way.
   and there is a late arrival, which means the
                                                            18
   building opens at the normal time but employees are
                                                           19
                                                           20
                                                                           JUDGE STRICKLER: Category or
   permitted to arrive late.
                                                               calculation? You asked him if he was familiar.
              All of these permutations could affect
                                                           21
   us, but for the fact that Mr. Marks has already
                                                               Were you asking him --
22
                                                                          MR. JANOWITZ: With the calculation for
   asked if we could start late tomorrow to accommodate
                                                            24 standalone portable subscriptions, mixed use. Let's
   witness travel schedules and so forth. Travel could
                                                            25 put it up.
25 be a problem. I was shown Weather Maps. I think it
                                                        676
                                                                                                                    678
 1 is real now. It is not fake news. And the snow is
                                                                           THE WITNESS: Is this in the packet you
 2 supposed to start in this area at about 9:00 p.m.
                                                             2
                                                                gave me as well?
 3 tonight and continue through maybe 2:00 tomorrow
                                                             3
                                                               BY MR. JANOWITZ:
                                                                     Q. It is in the -- I think it is in the
 4 afternoon. It is going to be freezing temperatures.
                                                             4
   There might be some sleet, which would be worse than
                                                             5
                                                                slides, yes.
                                                             6
                                                                     A. That's what this is?
 6
    snow.
 7
               So if you have a pen handy, please write
                                                            7
                                                                          Yes. And it is also up. So whatever is
    down this number. 202-707-0972. That's the Library
                                                                easier for you. Okay?
                                                             8
   hotline. So you can figure out where we are.
                                                                     A. Just because these got separated, you
               There also, my tech savvy colleague tells
                                                            10
                                                               said -- basically standalone --
10
11 me there is an app for that. It is the OPM alert,
                                                                          Standalone portable subscriptions, mixed
                                                            111
                                                            12
   the Office of Personnel Management. They call the
                                                               use.
    shots. So the OPM alert app is reliable and
                                                            13
                                                                          Thank you.
                                                                     Α.
                                                                          We're on the same page?
    generally up-to-date.
                                                            14
                                                                     0.
               If we have some permutations of absent
                                                            15
                                                                     Α.
                                                                          Yes.
15
16 employees, we can't update our own web site, so you
                                                                          So looking at the, what I think is
                                                            16
                                                                     Q.
                                                                sometimes referred to as a headline rate, A, that's
    can't count on us, but you could count -- you can
                                                            17
17
                                                                10.5 percent of service revenue. And that -- that
    count on the OPM alert app. And if I were a betting
                                                               percentage actually was the same as 2008. There was
   woman, I'd say we're closed tomorrow, but I can't
    promise that. It is D.C. The most likely is five
                                                               a 2008 fixing of the royalties, and I believe that's
    inches, which is most likely closed, but we will
                                                            21
                                                                the same headline rate; is that correct?
                                                                          It sounds right. I mean, if you
    soldier on. We maybe have an update at 5:00, film
                                                            22
23
    at 11:00.
                                                            23
                                                                represent to me that it is, I don't have a reason to
                                                                doubt it.
               Mr. Janowitz, I think you were
                                                            24
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Q.

Do you know if since this has been

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1 continued on from 2008, do you know what the basis 2 was for selecting 10.5 percent in 2008?
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A. No.

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4 Q. And the 10.5 percent, do you know what 5 the basis was then -- well, withdraw that.

Was there any debate in 2012 as to that headline rate?

- 8 A. As I recall, as I sit here, I don't
 9 recall if I'm aware of whether there was debate on
 10 that or not. It would have -- if I knew about it,
 11 it would have been from conversations with Pandora
 12 personnel, and I don't recall any such
 13 conversations.
- Q. Okay. And then looking at this
 calculation 1, there is a calculation and a
 comparison that you have to do in which you compare
 the 10.5 percent of revenue and see whether it is
 greater than another calculation that takes place in
 part B of this calculation, correct?
 - A. That's correct.
- Q. And in part B you determine the lesser of 22 80 cents for each subscriber per month and a 21 percent of the service payment to the record 24 companies for sound recordings.

And there is another alternative for

1 the 10.5 percent of music service revenue, correct?

- 2 A. That's my understanding, yes.
- Q. Okay. And the TCC is the prong that
 measures the mechanical royalty pool by reference to
 the amount that is paid to the record companies for
 sound recordings, correct?
- 7 A. As you are using it, as I said, I didn't 8 remember the -- I have seen the acronym, but if you 9 are saying it is representing the part of the 10 formula with the 21 percent and the 17.36, yes, what 11 it is doing.
- 12 Q. Yes, I am. And do you know how the 13 21 percent number or the 17.36 percent number came 14 to be selected in 2008 or 2012?
- 15 A. Solthe relationship between the two has 16 been explained to me as it was trying to make those
- 17 numbers comparable because they were on a different 18 base because, one, there was -- well, as it says,
- 19 when there is the pass-through, so that is trying to
- 20 make an adjustment so you are not essentially
- 21 collecting royalties on something that is just being 22 passed through.
- 23 : And the specific number, you then asked 24 about the overall level, actually I believe I have
- 25 talked to somebody at Pandora about that, but as I

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1 that, correct, the 17.36 percent?

- A. Yeah, depending on the nature of the pass-through.
- Q. Correct. So we have to calculate -- and, by the way, that 21 percent of service payment of record company, that's known as the TCC, correct?
- 7 A. I thought the acronym was slightly 8 different, but it is something -- I will take your 9 word for it.
 - Q. Have you heard TCCI? Does that --
- 11 A. That's what I am thinking of, but I don't 12 usually -- I don't think of it in terms of the 13 acronyms.
- 14 Q. Okay. Do you know what the difference is 15 between the TCC and the TCCI?
 - A. Not based on the acronyms.
- 17 Q. All right. Do you know on any other 18 basis?
- 19 A. No. If you told me what the concepts 20 are, I might know. I am saying I don't recognize 21 the acronyms, other than I have heard them.
- Q. I get it. So you have to compare -- you have to, first of all, make the calculation of the 24 TCC, compare it to the 80 cents, see which one is lower, pick that one, right, and then compare it to

- 1 sit here, I don't recall what the basis of those 2 specific numbers was beyond what I just told you.
- 3 Q. Okay. So you don't have an understanding 4 of how 21 percent was arrived at?
- 5 A. Not as I sit here.
- 6 Q. And how about the 80 cents for each 7 subscriber per month, do you know how that was 8 arrived at?
 - A. No.
 - Q. Did you ever know?
- 11 A. I think, again, I may have heard some 12 things about thinking about what its relationship 13 was with the 10.5 percent and how it would apply to 14 an average service, so I think I heard some things 15 about the relationships between those numbers.
- 16 Q. All right. And that's the best you can 17 do for us today?
 - A. That's correct.
- 19 Q. So I take it doing this comparison 20 between the A calculation and the B calculation,
- 21 that under certain circumstances; namely, where the
- 22 10.5 percent prong is lower, you believe it is
- 23 appropriate to measure the amount paid for
- 24 mechanical royalties as a percentage of the sound
- 25 recording payments, correct?

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A. Could you repeat that? I think I may 2 have misheard you. I wanted to make sure I get the arithmetic straight.

Q. I will do my best. So under certain circumstances, in other words, where the 10.5 percent -- well, just strike that.

Under certain circumstances you believe it is appropriate to measure the amount paid for mechanical royalties as a percentage of the sound recording payments, correct?

A. Yes.

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- Q. Okay. And do you know why this 12 13 alternative calculation was selected?
- A. There was concern -- my understanding is 15 there was concern that otherwise might not -- that applying it to the revenues, that it would get less money than the Copyright Owners were willing to bargain for, so they wanted to have -- are you asking why there is a minimum?
- Q. Why was this calculation of the alternative between the A calculation on the headline rate and the B calculation, the lesser of, 23 why was that agreed to by the parties?
- A. As I say, I think in general, and by 24 25 "general" I mean across the Subpart B and C services

A. I am not sure I understand what you mean by that question.

- Q. Okay. How does it serve, you know, on an 3 economic basis to advance the calculation?
 - A. I mean, I guess I am still not sure. Are you saying what's the benefit of having a greater of formula to the parties?
- Q. I will withdraw the question. Do you agree that it provides some theoretical protection against revenues that do not provide a fair return to the Copyright Owners? I am talking about this calculation on the TCC. 12
- 13 A. Yes, it is protection on the downside for 14 Copyright Owners.
- Okay. And looking at the 80 cent per 15 0. 16 subscriber per month, that effectively works as a 17 cap on the TCC, doesn't it?
 - On the -- on the TCC itself, so you are saying within box B --
 - 0. Yes.
- Yes. As it says, because it is the 21 Α. lesser of, it is the lesser of. 22
- Q. Right. Right. So you get the TCC until 24 you reach 80 cents, and then you are out, you don't 25 get any more?

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That's my understanding, yes.

Okay. Do you know how the 80 cent per subscriber per month was negotiated?

If the TCC protects the Copyright Owners, 0. then it would appear that capping it favors the Services, would you agree?

A. Actually, let me amend something. When I was answering -- sorry, the use of the TCC. When I was answering the earlier question about the protection, I was referring to everything collectively in box B, just to clarify that.

Now, in terms of your question, you are asking me would Copyright Owners be better off if 14 15 box 1 were eliminated, and the only -- and only box 2 remained, yes, they could potentially be better 16 17 off.

- Okay. Do you know if the cap, the 80 cent cap was an offset or compromise to the TCC prong in the negotiations?
- A. I don't know if it was explicitly called out as an offset or a compromise. I mean, overall in the negotiation, everything they are doing is a compromise, but I don't have information specific to 24 that.

1 or products, there was concern that the revenue base 2 might result in a royalty that the Copyright Owners 3 considered to be too low, and so they wanted some protection against that.

And then specifically as to the standalone portable subscription, why they did it a particular way, I don't recall something specifically about that.

- Q. And as for the reason for the calculation, that's something that you are speculating on, correct?
- A. You know, my recollection is that, again, 13 talking to Pandora personnel, that that was one of the reasons they were doing it, but as I say, it is at a high level. I don't have -- these specific numbers, I don't have a basis.
- Q. And apart from this conversation you had 17 18 with somebody at Pandora, do you have any other information on how this calculation was selected?
- A. I mean, you are saying in terms of what 21 was said or done at the negotiations?
 - Q.
 - Not that I recall. Α.
- Okay. And do you understand the economic 24 Q. 25 basis for this calculation?

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Q. And	do you know whether any other	number
besides the 80	cents was proposed during the	2012
negotiations?		

- A. Not that I can recollect. Again, it may 5 have been something that I had a discussion with from somebody from Pandora, but I don't remember -certainly as I sit here, I couldn't tell you what the range of numbers was, if any.
- 9 Q. And do you have an opinion on whether the 10 cap should be a different number?
- A. My opinion is, as I stated, that the 12 collection of numbers would be reasonable for the 13 reasons I have stated in my report. So the 80 cents 14 is part of that overall conclusion.
- Q. Right. But specifically have you done 16 anything to analyze whether 75 cents would be 17 better, whether 90 cents would be better, what the 18 impact would be of changing the 80 cents?
- 19 A. No. As I actually answered earlier in 20 response to a question by Judge Strickler, I have 21 not done separate analyses of the individual 22 components. What I have done is assess the effects 23 of the overall package.
- Q. But notwithstanding the fact that you 24 25 haven't done any analysis, you accept these numbers,

- 1 50 cents for each qualified subscriber per month, 2 sometimes known as the mechanical-only floor,
 - 3 correct?
 - 5 Q. You mentioned this floor in your report, as I recall, and you suggest that it be removed in 6 the future, correct?
 - A. That is correct.

A. Yes.

- Q. ! But you don't address why it is there in the regulations that were arrived at as a result of the 2012 and 2008 settlements, correct?
- 12 A. I'm sorry, can I ask one clarifying? 13 When you say why it is there in the regulations, I 14 mean, my understanding is it is in the regulations 15 because the parties agreed to it.
 - Q. Correct.
- A. Are you asking me am I aware how the 17 parties came up with that specific thing?
- 19 O. Yes.
- A. The answer to that question is $\ensuremath{\text{I}}\xspace^* m$ not 21 aware.
- Q. And you haven't talked to anybody about 23 that?
- 24 A. How -- about the --O. About how the 50 cent mechanical floor

1 correct?

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A. Yes. My conclusion is that the overall 3 package -- well, it has the benefits I have talked

- Q. And once you have computed what is called 6 the all-in royalty pool, that's the top half of the calculation, you deduct the amount of performance 8 royalties, correct?
 - A. That is correct.
- 10 0. If you are following this calculation.
- And you do that to identify what's left Q. 13 over, which would be the mechanical royalties, 14 correct?
- 15 Yes, if you find the total to be the sum Α. 16 of those two, yes.
- 17 So at this point after the deduction, you 18 have got the amount of mechanical royalties and so 19 you could theoretically be done, correct?
 - A. That's correct.
- Q. Okay. But you are not done, correct, at 22 least not under this calculation?
- 23 A. Not for this one.
- Q. Okay. So you need to make another 24 25 calculation to compare the mechanical royalties to

1 came about.

- A. Actually I believe I talked to Adam 3 Parness about the concept of the floor. I don't recall discussing the 50 cents in particular, but 5 did discuss where the floor came from or the idea of
- 6 the floor Q. But, in any event, it is clear, isn't it,
- 8 that the floor protects the Copyright Owners from 9 being paid mechanical royalties that are
- 10 unreasonably low or nonexistent, correct?
- A. You are reading several things in, with 12 the unreasonably low and non-exist -- it is 13 certainly the case that the mechanical royalties calculated by this couldn't fall below 50 cents.
- Q. Right. And so there was an assumption, 16 there is an assumption that this is for the protection of the Copyright Owners, correct?
- A. You used the word "protection." It 19 certainly is my understanding that that clause was 20 put in because the Copyright Owners sought to have 21 it. And it would be the case that if the only thing 22 you did, if you held everything else fixed and you
- 23 removed it, you would potentially have lower
- 24 royalties. So in that sense it is protecting them. 25 JUDGE STRICKLER: Excuse me, counsel.

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Dr. Katz, you have testified as counsel 2 has taken you through each of the elements of the 3 2012 settlement rate that you were unaware of how the particular number was arrived at in negotiations.

Did you attempt to find out how they were arrived at in the course of doing your expert work in this proceeding?

THE WITNESS: No. I mean, I did ask some 10 questions about negotiations and the particulars you heard about, the floor, to understand why it was there, but my overall approach, again, has been just ask the question and we take this as a benchmark. 14 Is it reasonable to take the structure? And I 15 didn't seek to try to fine-tune the breakout to different parts.

JUDGE STRICKLER: Did you think it was important to do a breakout of the individual parts and find out why they were set at the levels they

21 THE WITNESS: No. I mean, if it could be 22 done easily and get out, so to have the information, it could potentially be useful but, again, in trying 24 to rely on the benchmark, I am trying to say, okay, 25 well, the industry decided this, let me ask, is it

That is correct.

And potentially that could be disruptive to the publishers; isn't that right?

A. If by disruptive you mean that they could get less revenue, that's correct.

Q. Okay. And if we look up to the part 1 of the calculation, we see what you referred to as a minimum before, we're making the distinction between minimums and the floor, right?

That is correct.

And you have referred to the minimum and we see the minimum there, which is capped, right, at 12 13 80 cents, but the 50 cent mechanical-only floor provides an additional layer of protection to the Copyright Owners, correct?

A. Yes, in the sense that I talked about before, ves.

Q. And it protects them from the performance royalties eating into the total payments such that the mechanical royalties are less than the 50 cent per subscription per month amount, correct?

22 A. Yes, I will accept that as a mathematical 23 statement, yes.

So the regulation protects the Copyright Q. 25 Owners at least in some situations from a rise in

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1 the performance royalties eating into the

mechanicals, correct?

A. Yes. My only hesitation is when you are saying protects, because it extends the same people getting the mechanicals and performance royalties, the total is staying the same, but I agree that it keeps the number that is calculated as a mechanical royalty from falling below that level.

Q. Well, if the performance royalties were high enough they could reduce the mechanical royalties to next to nothing or nothing, correct?

A. Yeah, I guess under this formula, they go 13 high enough -- well, to think about the lesser part but, overall, yes, they could push it down.

So let's look at part 3 of the calculation. You need to divide the total royalties by the number of plays. That gives you the royalties per play, correct?

> Yes. A.

And royalties per play is a measure of Q. revenue by usage, isn't it?

A. Yes, it is a measure of usage.

23 Okay. So as a result of these Q. 24 calculations, if I write a song and I get a million plays, and you write a song and you get only 100,000

working overall?

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And I thought it would be beyond my expertise to start analyzing the effects of each of the individual components separately but --

JUDGE STRICKLER: Is it fair to say then that you treated it as you would treat any other benchmark that you considered to be a market benchmark, in the sense that you didn't want to analyze the particulars but just try to figure out 10 how the particulars applied?

THE WITNESS: Well, I, mean, I did do 12 some analyzing the particulars, given the end 13 concluded the point about the floor itself, but I was largely relying on this is what the industry has 15 done and take it at a high level, so I didn't get into most of the particulars.

And, yeah, I guess in some sense, that's 18 what I would tend to do with any benchmark. That's why I am using it as a benchmark to avoid having to model things and build it from the ground up.

21 JUDGE STRICKLER: Thank you.

22 BY MR. JANOWITZ:

23 Dr. Katz, you are proposing on changing the 50 percent -- the 50 cent mechanical-only floor, 25 correct?

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A. Yes. Sorry, I was just reorganizing.

Q. We can help you with it if it got messed

MR. MARKS: This is demonstrative 2? I

19 Somehow demonstrative 9 got mixed with demonstrative

24 want to make sure we're on the right page?

MR. JANOWITZ: It is.

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22 up.

20 1. Yes, I have that.

OPEN SESSION 695 697 1 plays on the same service during the same month, I MR. MARKS: Thank you. 2 will get ten times the amount that you will get 2 BY MR. JANOWITZ: 3 because my song was listened to more, correct? Q. Okay. So what you are looking at is a 4 slide that shows the mechanical royalty -- royalties A. I believe that's correct. 5 Q. And that's fair, isn't it? 5 per play as of December 2015, and it shows that data 6 for seven interactive services, Deezer, Apple, A. It certainly is consistent, I think, with 6 7 what you could see coming out of an effectively 7 Amazon, TIDAL, Rhapsody, Spotify --8 competitive market, so in that sense it is fair. A. I'm sorry, can I interrupt? When you say 9 this is December 2015 or that is December 15th of 9 Again, we have talked about there are different 10 perceptions of fairness, but I wouldn't say it is 10 the year? 11 unfair based on the notion of fairness that I put O. I do not believe it is December 15th. 11 12 forth. A. 12 It is December of the year 2015? 13 Q. All right. And the basis for this is the O. Correct. 13 A. Okay. Thank you. 14 more my song is played, the more I get, right? 14 A. Yes. I mean, it is your hypothetical, Sure. And you can see by looking at this 15 0. that a stream on Deezer is worth almost ten streams 16 yes. 17 O. Yes. And the payments under this on Spotify ad-supported, correct? 18 calculation should increase in direct proportion to 118 A. Yes. 19 19 the usage, correct? Q. Yes, you agree with that? A. In this calculation, that's what happens, **1**20 A. Yes, I agree with that. 21 correct. 21 Q. Okay. So the same song can be played 22 about tenstimes on Spotify ad-supported to generate Q. Okay. Now, I understand from your 23 earlier testimony that the settlement provides a the same royalty as one play on Deezer, correct? 24 benchmark that meets the objectives of 801(b)(1), A. That's correct. 24 25 correct? 25 Q. I am going to show you another slide also 698 1 restricted. This is demonstrative 3. And this is a Α. Q. And the second objective is to afford the 2 slide that was actually prepared by Spotify's 3 copyright owner a fair return for his or her 3 expert, Dr. Leslie Marx. 4 And this slide shows that the mechanical 4 creative work and the copyright user a fair income, 5 correct? 5 royalties for play on a weighted basis, weighted by 6 Dr. Marx, has declined by almost 50 percent between Q. I am going to refer to a slide, but it is 7 2012 and 2015 at a time that the amount of streaming 8 | has increased dramatically, | correct? 8 restricted, so I think perhaps the easiest thing is MR. MARKS: Object to the question. for everybody, if that's okay, Your Honors, to look 10 at it on the paper. 10 THE WITNESS: You are asking me if the JUDGE BARNETT: Certainly. 11 11 figure shows that? 12 MR. JANOWITZ: That way we don't have to 12 JUDGE BARNETT: Excuse me. 13 13 clear the courtroom. THE WITNESS: I'm sorry. 14 JUDGE BARNETT: I think we can do that. 14 JUDGE BARNETT: What is the basis of the 15 BY MR. JANOWITZ: 15 objection? 16 | | MR. MARKS: Well, I don't believe that 16 Q. And you have it there, correct? It is 17 the slide called Mechanical Royalty Per Play? 17 Mrl Janowitz has accurately described what this

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18 chart depicts, which is not -- which is not weighted

JUDGE BARNETT: Okay. Did you want to

19 basis across all services, but, rather, is only a 20 select number of services, so I don't think it is

24 | MR. JANOWITZ: Well, this is based on

25 data from Harry Fox. It is a select number, but it

21 fair to question the witness about this.

23 respond, Mr. Janowitz?

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1 is a number. It was not selected for the purpose of adverse selection to show a particular result. 3 MR. MARKS: This isn't his chart. I 4 think it is beyond the scope of his direct examination. And we don't even know, the record is not clear on which Services are in, which Services are out. I don't think it is particularly meaningful or a fair game for this witness. 9 MR. JANOWITZ: You know, I don't really 10 need the chart.

MR. MARKS: Okav. 111

12 JUDGE BARNETT: Thank you.

13 BY MR. JANOWITZ:

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- Q. You have been studying this area now for 114 15 some time, correct?
 - Yes, I have, that's correct. Α.
- Q. And you have done, for example, that 17 calculation showing that the effective per play rate 19 has declined?
- 20 A. There have been a lot of those calculations going around, but --
 - Q. You are familiar --
- 23 A. I believe that's right, that overall look 24 at the industry average to the effective per play 25 rates have been declining.

And that level of engagement could well go down as we start having more and more people stream, in which case you could see the trend 4 reverse. So I just don't see a tight linkage 5 between overall amount of streaming and what you are talking about, but in that sense, as I said, I am not surprised if it happened.

- Q. But you are not surprised to see that the mechanical royalties per play are declining at the same time as the streaming activity is increasing?
- A. No. In fact, there is a sense in which they could be related, not that the one has to drive the other, but the other way around is the extent to 14 which consumers are seeing that streaming is more and more attractive because in terms of economics, working our way down the demand curve and trying to 17 expand the market, you could then see that the average revenue per play would be falling. And 18 119 given it is a percentage of revenue of royalty, you 20 then would see the royalty per play also falling.
- So there is -- so I just want to be clear A. 23 about the linkages because there are a lot of different possible ones. So there could be 25 something where these have the same cause, which is

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Q. So do you have any doubt that the mechanical royalties per play have been declining?

- A. In terms of -- you are saying in terms of the industry averages?
 - O. Yes.
- No, my understanding is that's what's happened, and that's, I believe, what my calculation showed.
- Right. And given the amount of the 10 increase in streaming, it wouldn't surprise you to learn that that's a pretty severe decline in the per -- in the royalties per play, would it?
 - A. I mean, it wouldn't surprise me because I don't think there is much of a relationship in terms of what you just talked about. There is no reason -- you could have a dramatic increase in streaming and have the opposite happen, so it doesn't surprise me because I think they are unrelated, largely.
 - Q. I'm sorry, I didn't hear the rest.
- 20 I think they are largely unrelated. I 21 mean, you have more people streaming. My 22 understanding is what is driving these trends is not 23 the total amount of streaming, but it is the 24 intensity or the level of engagement of consumers

25 who are streaming.

1 the industry is figuring out how to bring more 2 consumers in at lower prices and then that has this effect.

But just the math would lead you to conclude that given the number of streams that are -- that we have got going up, and the fact that we have got -- I'm sorry.

Given the fact that the number of streams are going up, it doesn't surprise you to see the royalties per play decline?

- A. Again, what it is driving at, though, is not the streams overall but it is a question of the streams per subscriber.
- Q. Yes, I am actually not asking you for the causal relation, just the --
- Again, if you want to say -- so, yes, it wouldn't surprise me if it went up and mathematically it wouldn't surprise me if it went down.
- Is it your understanding that it has been going down?
 - A. Yes.
- 23 And taking a look at demonstrative 4, 24 this may not be restricted but it is safer probably to look at it in the paper anyway.

Rates and Terms (Phonorecords III) JUDGE BARNETT: Okay. Thank you. BY MR. JANOWITZ: Q. Do you see a chart showing the increase 4 in streaming activity roughly 2012 to the present, correct? A. I guess that's what it says. I don't 6 know exactly what it is measuring, but it says streaming activity on it. 9 Q. Okay. And this is a sharp incline in 10 streaming activity, correct? 11 A. There are certainly times in which one 12 could characterize it that way, yes. Q. Okay. And does this conflict with 13 14 anything you know about what is actually happening 15 with regard to streaming? A. No, not at the level -- I mean, I can't

17 read the numbers, but in terms of broad trend, it is 18 consistent. Q. Seems right, okay. And despite more streaming and, 21 therefore, greater usage, the payments to the 22 Copyright Owners are not increasing proportionately, 23 are they?

- A. Proportionately to what?
- Proportionately to the increase in

1 going to rise when your songs go up.

- Q. They are going to rise but they are not going to rise in direct proportion to the streaming, are thev?
- Well, actually, I think from the point of view of an individual songwriter out to a lot of decimal places, I think maybe I am wrong, but I think it does rise in proportion to your streaming. 9 Yeah, I am actually sure of that.

10 Because if you go back to your 11 calculation, you take the royalty pool, divide by 12 the total number of streams, and that's going to 13 give you that per play amount that is using -- it is 14 the mechanism for allocating the pool among 15 songwriters. And I suspect for all but maybe there 16 are very few, if any, songwriters, so that their 17 number of songs actually changes that calculation, so it is rising proportionately.

- Q. I think you are talking about it as the 19 20 calculation under the standalone portable 21 subscription calculation. Is that right?
- A. No, it is any of the calculations. If in 23 the end there is a royalty pool and then it is 24 divided by the total number of plays to get an 25 amount per play, that amount from the perspective of

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1 streaming.

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A. I mean where you are measuring streaming 3 by physical numbers of streams?

O. Correct.

- A. 5 In that case it is not rising proportionately. 6
- Okay. So the proposition that we 8 established before when we looked at the 9 distribution of revenues under Subpart B of the more 10 the song is played, the more I get paid, that's not 11 at work here, is it?
 - A. I mean overall --
 - With respect to streaming?
- No, it is still at work there because in 15 terms of if you have, in your example before showed 16 if you had two songwriters and one song was played 17 ten times as much, that person would be getting ten 18 times the royalties the other one would. So there 19 is an element of that.
- Q. Yes. But if respect to if I am a 20 21 songwriter and my song is being streamed ten times 22 as much, my revenues are not going to rise 23 proportionately, correct?
- 24 A. Well, no. You are going to get an 25 increased share of the pool, so your revenues are

1 any given songwriters is essentially a constant at 2 that point, so then it is going to scale 3 proportionately with the number of plays.

- Q. If I were a songwriter getting royalties 5 based on streaming three years ago, and I had the same number of streams now, would I be getting the same revenues on the same song, all else being equal?
- 9 My quess is you would be getting less 10 now.
- 11 Q. Okay. Now, do you see the decoupling of usage for payment as a positive feature, don't you, in the context of this proceeding?
- 14 A. When you say usage for payment, you are 15 talking about in terms of what is happening with the retail prices? Are you asking do I think that all-you-can-eat pricing has benefits for the 18 industry, yes. I mean, part of it is, when you say 19 usage, exactly what you mean, because I am 20 testifying, and so have some of your economic 21 experts, there is the option value, which you can 22 think is part of the usage of the service, if you 23 want to use it that way and then the actual
- 24 consumption. 25 Q. All-you-can-eat pricing does not provide

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1 an increase in payments to the Copyright Owners proportionate to the amount of use, correct?

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- A. If you are saying you have more subscribers and that's how use is changing and you are keeping the subscription rate, then it is proportionate. If you are talking about a change holding fixed the number of subscribers but changing the intensity or degree of engagement --
 - Q. Correct, that's what I am talking about.
- Then in that case it would not rise proportionally.
- Q. And you say in paragraph 35 of your 13 rebuttal report that the revenue base structures 14 facilitate retail pricing "because the service does 15 not pay additional royalties solely because a user has listened to more streams."

And that's your position, correct?

- A. I am wondering if I can see my rebuttal 19 report, because it is 170 some pages, and I did not review my rebuttal report preparing for today because I had not anticipated being asked questions about rebuttal.
 - Q. Would you accept a representation?
- Sorry to be peevish but just given some 24 25 of the --

Q. I am not giving you a hypothetical. I am asking you whether that fact was something that you considered in your opinion and how you took it into account, if you did? 5

A. I am saying it is something I took into account but if you are asking me did it make any difference --

Q. Yes.

- When you talk about difference, then you 9 A. 10 have to have a basis of comparison. I mean, that's a logical thing.
- Q. I agree. But you would have the basis, 13 not me.
- A. No, and I am saying if I had seen 14 15 something very different, conceivably I could have reached a different conclusion, but I saw what I saw and I built my analysis on that. 17
 - Q. Do you have an opinion on whether interactive streaming is a substitute for other types of consumption of music, such as CDs and PDDs?
- 21 My belief is, my opinion at the aggregate level is that it is a substitute. 22

23 JUDGE STRICKLER: You say it is a 24 substitute?

THE WITNESS: Is a substitute.

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1 BY MR. JANOWITZ:

Q. When you say on an aggregate level, what do you mean by that?

A. Well, one of the things that has come up is, and as made reference to the paper before by Aguiar and Professor Waldfogel is that when they did their econometric analysis, they actually got different answers to that question depending on 9 whether they were looking sort of song by song and getting the questions about whether having songs being streamed had a promotional effect. 11

And, again, taking back to something you 13 have heard a lot of in Web IV, saying like terrestrial radio is said to have. And I think there their econometrics suggested it was 15 promotional.

But when they did their aggregate analysis, which I think is the more appropriate one 18 19 here, they concluded that they're substitutes. And that's how I was answering the question, and my belief just generally is that at a broad level that they are substitutes. 22

Q. But I take it what you are saying is that the Aguiar and Waldfogel analysis also considered the possibility and looked at data that suggested

That's okay. Why don't we -- rather than Q. take the time, let's move on.

Now by 2015, three years after the settlement of 2012, mechanical royalties from interactive streaming amounted to less than 2.7 percent of total music publishing revenues, correct?

- That sounds right. I mean, I gave a number. It may be what you are reading from the number in my report.
 - Q. That's the number you gave.
 - Yes, based on NMPA data.
- Did you consider the fact that the amount 14 of revenues from interactive streaming in 2012 and 15 for years thereafter was insignificant compared to the total publisher royalties in deciding the suitability of the 2012 settlement as a benchmark?
- A. I mean, the pattern is something I took 19 into account. It is something I thought about. I don't know what to say beyond that.
 - Q. Did it have any impact on your opinion?
- A. Well, to answer that question, you have 22 23 to say relative to what? I mean, had there been a 24 different pattern, I might have had a different 25 opinion.

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1 that the stream was actually promotional and not 2 substitution?

- A. That's right. When they did their, I 4 think they called it their song level analysis, they 5 found that, the econometrics.
- Q. And did you look at that song level 7 analysis?

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A. I mean, I took it into account. And the 9 thing is that the song level analysis would suggest 10 then that the opportunity cost is very low or even 11 negative because if it is promotional, then it is 12 saying that the publishers and songwriters are 13 benefitting from it.

So I took it into account, but they 15 expressed doubts themselves. And I took the more 16 conservative approach of saying let me assume that 17 it is a substitute and that there is some 18 opportunity cost.

- 19 Q. Why is the substitutional approach more 20 conservative?
- 21 A. Well, when I say conservative, more 22 conservative in the sense that it is a more 23 favorable assumption to take in terms of its 24 implications for having a higher royalty -- if it 25 were promotional, I think that would counsel towards

1 specifically saying I'm worried about that, but I 2 have to say I would be guite surprised and at some 3 level disappointed in them, if they didn't think of

- 5 Q. This is purely speculation on your part, 6 correct?
- Yeah, Well, I would say as an expert, it 8 is a statement about that it would be economically 9 rational for them to take that into account, and 10 that information about that would have been 11 available to them at the time, which should have led 12 them to conclude that that was a possibility.
- Q. Do you know what information was 13 14 available to them at the time?
- A. So based on looking at trade press and 16 Internet, I mean, there was a view at the time that 17 streaming, it was wide -- held by a lot of opinions that streaming was going to be the next big thing 19 and it was going to be important in the future. So 20 I understand that at that high level.
- Q. Is there anything in your written direct 22 report that is cited to indicate contemporaneously 23 as of 2012 what people were saying about the impact 24 of substitution?
- 25 A. You asked if it was mentioned

1 having a lower royalty rate.

So by assuming that it is not 3 promotional, that actually tends to pushing them 4 having a higher royalty rate than otherwise. I took 5 that to be conservative given that I have been 6 retained by the licensees, rather than the 7 licensors.

- Q. So you mean conservative from your 9 perspective, not from the Aquiar and Waldfogel 10 perspective?
- A. That's right, conservative from given 12 that they were saying -- well, some of it says that 13 it is promotional and some not. I said let me take 14 the assumption that gives rise to lower royalty 15 rates and take that as the working assumption.
- 16 Q. Do you know whether the participants to 17 the 2012 settlement considered the issue of 18 substitution?
- 19 A. I have not heard from them. I would be 20 extremely surprised that they didn't, given that 21 certainly people in the industry have been worried 22 -- and partly I think they saw from the rise of 23 downloads -- that they have a history of new formats 24 coming in and replacing old ones, but I don't know 25 if somebody -- I have not heard from anyone

1 incidentally. And as I sit here, I don't recall 2 anything cited that would be in that category.

- Q. Do you know whether the participants to 4 the 2012 settlement considered that the rates under 5 Subpart B were satisfactory given substitution?
- A. From reveal preference, they would have 7 concluded it was satisfactory enough that they 8 agreed to the settlement, but I don't have access to 9 their specific thinking about it.
- 110 Q. And specifically you don't know whether 11 they were considering substitution when they 12 approved the rates, correct?
- 13 A. That's right. I don't know what was in 14 their heads when they were doing it.
- Q. Right. Do you know what the rate of 16 substitution was in 2012?
- 17 : A. I just need a minute to think about the 18 data. No, there are some of the -- just give me a 19 minute to think about the timing. I think the 20 things I looked at are not for 2012.
- 21 : Q. Okay. Do you know whether given the 22 small amount of interactive streaming in 2012, the 23 participants to the settlement had adequate data to 24 calculate a rate of substitution?
- 25 : A. I don't know whether they had adequate

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1 data or not.

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- Q. Okay. Given that streaming today 3 involves billions of streams, it is important to get that rate of substitution right, assuming it exists, 5 because it will be multiplied by very large numbers, correct?
 - A. If you are asking me does the royalty rate matter, given there is a lot of streaming, the answer is yes.
 - Q. Okay. So if you were thinking about this in 2012, you would have had at hand very little data to do this piece of analysis, correct?
- A. It depends on your characterization of "very little data." Particular private parties might actually have -- they might have a lot of data 16 actually on what was happening to downloads and CD sales, and if you were saying the aggregate amount of streaming is low, that I would agree with, but that's a different question than the amount of data.

So I am not sure how much data or how detailed data they would have access to, with respect to streaming.

Q. I am talking about data on streaming. I 23 24 am not talking about data on the change in the video 25 business or the change in CDs or anything else. I

1 means you don't have very much data. It is a more 2 complicated question than that, what it means, whether you have enough data because it also depends on the nature of the data themselves.

JUDGE STRICKLER: Excuse me, counsel. Just apropos to this discussion about substitution, potential substitution, the Aguiar and Waldfogel study that you referenced, page 82 of your direct testimony, was -- apparently has a working paper dated 2015, and it was apparently published in 2016.

Do you know what time period was covered by the data they analyzed?

THE WITNESS: So they looked over -- I 14 tried to do this from memory -- over some different time periods. They had what they considered to be 15 better data for the U.S., I think for 2013 to 2015. So their preferred specification and the one that 17 gives rise to the 137 -- 147 number --

JUDGE STRICKLER: 137.

20 THE WITNESS: 137 number, I think that is 2013-2015. Whatever it is, it was a smaller time period than the full set of data they had.

JUDGE STRICKLER: But you recall that it 23 24 was after the 2012 settlement period?

THE WITNESS: Yes, it is more recent.

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1 am talking about data on the streaming business. A. I'm sorry, I thought you were asking about substitution. Maybe I misunderstood you.

Q.

Well, in substitution you have to A. substitute something for something else. So that's why I was answering your question about if you are going to look at the substitution and the amounts of data you need, at some level the amounts of data also were substitutes because you have -- if you 11 have a very good understanding of what is happening 12 to CD sales and digital downloads and things like 13 that, that will help you get a better understanding of the effects of the streaming.

And it is potentially the case that there 16 could be a small amount of streaming that you had the right data and you had detailed data enough on 18 your sales that, in fact, you could get a good idea of substitution.

- Q. And that's -- I'm sorry. I didn't mean 21 to cut you off.
- A. I guess what I am disagreeing with, I 23 think is implicit in your question is the notion 24 that if there is only hundreds of millions of 25 streams or something and not billions, that that

1 That's earlier when I was pausing trying to 2 remember, when I was asked did I have anything about 3 2012, I was trying to remember their data went early 4 enough. And it may be that some of their data do overlap with 2012, but their preferred specification, in my recollection, is certainly -it started after 2012 and certainly the period 8 finished after 2012.

JUDGE STRICKLER: Thank you.

BY MR. JANOWITZ:

- Q. Dr. Katz, the Waldfogel and Aguiar paper, that was a working paper?
- My understanding is it was a paper commissioned by the European Commission and put out in a series of theirs, and I guess we call it a working paper.
 - Q. That's what they called it, isn't it?
- I don't recall, but something like it. I just don't remember the name they had on it.
- Q. And they said in the paper that it wasn't a complete, completed study, didn't they?
- A. My recollection is they said there was more work to do, which is pretty much always true with econometric stuff. 24
 - And when you have a working paper, is it

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1 in a peer-reviewed journal?

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- A. No, not -- the working paper itself is 3 not a peer-reviewed journal.
- Tell me what a peer review means in this Q. 5 context?
- A. Well, I assume you are asking about 7 peer-reviewed journal, you are asking about academic 8 journals where authors would submit a paper in hopes 9 of publication. And then it would be reviewed by 10 other experts in the field to determine whether it 11 merited publication.
- 12 Q. So it didn't go -- this Waldfogel or 13 Aguiar paper didn't go through that process, 14 correct?
- A. Not in an academic journal. And I don't 16 know, to anticipate your next question, whether or 17 not there was some sort of internal peer review at 18 the series or whatever, the working paper series 19 they used, but it certainly, as far as I know, 20 didn't go through an academic journal peer review.
- Q. And when the paper was published, were 22 you aware of its existence?
- A. Yeah, I don't recall seeing the published 23 24 version of that paper. I think the ones I have 25 reviewed have been the working paper version.

1 substituting the streaming service for piracy.

2 | | | | | | I just want to be careful when you say it 3 wouldn't be a substitute because that's a property 4 of the good, it could well be a substitute for other 5 things at the same time people were switching but --6 the act --

- 7 Q. I am talking about the act of substitution.
 - A. The act, I agree with you.
- Q. And do you think that participants in the 10 11 2012 settlement considered the issue of what was 12 being substituted for what, in other words, what 13 alternatives there were to streaming and what the 14 impact on streaming would have with respect to each 15 one of those alternatives?
- 16 A. Again, I have not interviewed or read 17 interviews with the people involved in that, so I 18 don't know what they were thinking. You know, in 19 terms of what would be economically rational, they 20 should have been thinking about those things, but I 21 can't rule out that they were economically 22 irrational.
- 23 Q. Was piracy still an issue in 2012, 2011, 24 2012?
 - A. Yeah, I believe it remains an issue

- Q. And did you -- have you seen that paper 2 prior to your being engaged in this proceeding?
- A. I am not sure because, I mean, I know 4 Joel and I have read his work. And I have been 5 interested in seeing him give seminars, so I don't 6 know if I have seen that before or not. I certainly 7 had not read it with the care I have read since 8 then, but I might or might not have seen it.
- Q. Doesn't the rate of substitution depend 10 on what other forms of consumption a consumer is 11 foregoing?
- I am not sure what you mean by -- I mean, 13 the rate would specify -- I am not sure I understand 14 your question.
 - Q. Let me try it again.
- A. You would say the rate at which I 17 substitute A for B, would depend on A and B both.
- Q. Exactly. In other words, if a consumer 19 used to listen to only pirated music and now listens 20 to an interactive streaming service, that would not 21 be a substitute for CDs or PDDs, correct?
- 22 A. You are saying -- if you are asking would 23 that be an active substitute -- if you amend it that 24 way, that would not be the active substituting for 25 that. It would be what you are saying, you are

1 today.

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- Q. So is it possible that the participants 3 to the settlement thought that the principal impact 4 of streaming would be to reduce piracy and increase the pie of music revenues?
- A. Actually I think that has -- you actually showed data, I think that view is possible, because 8 it turns out to be that is what was true, it has 9 increased the pie.
- 10 And you know that it has increased the 0. 11 pie how?
- A. I guess looking at the data and that it 12 13 stabilized industry revenues and that if you ask industry sources or look at -- see what people said, 14 15 streaming has been the thing that has generated the 16 increase in revenues, and then if you look at Aguiar 17 and Waldfogel, one of the things they say there is 18 streaming, in addition to displacing music sales, is also displacing piracy, so you are going from a situation where Copyright Owners are getting no 21 royalties to one where they are getting royalties. So there are several different sources,
- 22 23 but I think streaming is widely attributed with
- being responsible for staunching the erosion of 25 revenues.

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Q. Well, you have used two words. You said 2 stabilizing the revenues and staunching the erosion 3 of revenues. How did that actually increase the pie, increase the amount of revenues?

A. Stopping the decline, in the perspective of economists or from arithmetic, if you are stopping something from declining, it then means as a result of that, it is at a higher level than it otherwise would have. Then you are responsible for that difference or the delta is an increase.

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It is also the case, I believe, in the 12 last couple of years, it has not just stopped the 13 decline, but has actually reversed it so there has been an increase.

- Q. Do you know what that increase is?
- 16 I think I report it in my report, but it Α. 17 is --
- 18 When you talk about the delta of decline that it is preventing, how do you measure that delta 19 of decline?
- A. Well, conceptually you are asking the 22 question what would have happened absent streaming, and it is trying to project the trends. And there is obviously risks in trying to project trends, but 25 project how much the downward trend would continue

1 taking people away from piracy because it is a 2 better alternative. And that could actually shift over time, as the set of streaming and offerings changes and brings in different types of consumers.

- Q. And do you know whether Aguiar and Waldfogel took that into account in their paper?
- A. I don't recall their doing something in 7 terms of the econometrics. They may have discussed it. I just can't remember as I sit here whether 9 they talked about that possibility.
 - Q. And have you done such a study yourself?
 - To look at changes in -- no, I have not. Α.
- Okay. And if you were negotiating the 2012 settlement, you would want to consider as best 14 you could the impact of an increase in scale, wouldn't you?
 - When you say, again, meaning --A.
 - Q. More streaming.
- 19 A. And, I mean, in general, I would want to 20 form some sort of view of the future and what I thought was going to happen with streaming, and it would, might help me think about the future of my 23 industry and my bargaining positions, so yes.
- Q. And one of the reasons you think about 25 that, if you had thought about this issue in 2012,

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1 was how it would affect substitution, correct?

- 1 in the other sales or, I'm sorry, the other formats, 2 and then you are asking how much is it different than that.
 - Q. Have you done that?
- 5 And sort of quantitative assessment? No, 6 I have not.
 - Q. Do you think that the rate of substitution might change with scale, in other words, the amount of streaming?
- A. Let me make sure I understand the use of 11 scale. So you are not asking -- you are asking as 12 more and more people engage in streaming and we 13 bring new consumers in -- I'm sorry, I apologize. You asked what would change? It just slipped my mind. It is my fault. I'm sorry.
 - That's all right.
- I am asking whether the rate of 18 substitution --
- A. Okay, yeah, so the rate of substitution 20 could change as you bring new consumers into the market. And in particular you might think if you 22 start bringing in -- if you bring out new services, 23 for example, that have lower prices than past 24 services and are getting more and more attractive, 25 you might think that increasingly I am going to be

- A. Yes. And to take it back to something we were talking about earlier this morning, the rate of substitution would factor into thinking about opportunity costs. So it is something you would think about, if you were economically rational, you would think about it. 7
- Q. But in 2012 you wouldn't know, would you, 9 how much would be streamed in 2016, even by order of magnitude, correct?
- A. If you are asking if I would know, I doubt if I would know. If you are asking what did 12 the people who were industry experts at the time, 13 how correct or how far off they are, I haven't done any sort of assessment of overall how well people did in predicting.
- Q. So in 2012 there were at least two variables that were unknown, the rate of 18 substitution and the future levels of streaming, 20 correct?
- No, the rate -- I don't know if it is 22 correct about the rate of substitution was unknown because as we talked about, I don't know what access 24 to data they have. They may well have had a sense 25 in 2012 of what the industry participants thought

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1 the rate of the substitution is. I don't know.

- O. And the basic answer is I don't know, 3 correct?
 - A. That's correct.
- Q. You don't have any information. And yet 6 you think that the entry into the field after the settlement in 2012 of companies that today account 8 for over 95 percent of interactive streaming does 9 not affect the suitability of the 2012 settlement as 10 a benchmark; is that right?
- A. Again, if what you mean by does not 11 12 affect the suitability is that I took that factor 13 into account and having seen that concluded that the 14 2012 settlement, subject to modification, is an 15 appropriate benchmark, yeah, that's true, but, I 16 mean, again, there were changes. I took them into 17 account but the bottom line is I have concluded it 18 an appropriate benchmark.
- 19 Q. Okay. In your deposition you considered 20 the issue of substitution as between interactive 21 streaming and CDs, correct?
- A. The topic may have come up in my 23 deposition, sure.
- 24 Q. I believe you testified that in 25 considering the rate of substitution, you had to

- 1 that streaming was a substitute for CDs and PDDs 2 unless you can establish who switched and why,
- 3 correct?
- A. Yeah, if you just said -- if you just 5 told me those first two numbers, you said one went 6 up and one went down, that by itself is not going to 7 be enough.
- 8 : : Q. Let's talk a little bit about rate 9 structure.
- At page 59 of your direct report you 11 address rate structure. And you conclude that "My 12 analysis has identified no changes in industry 13 conditions since then" -- meaning 2012 -- "that 14 would require changing the fundamental structure of 15 the percentage-of-revenue prong," is that correct?
- A. This is paragraph 80? Anyway, that 16 17 sounds right.
- 18 Q. Yes, it is paragraph 80. Now in 2012 19 Spotify had just entered the U.S. market, correct?
- A. In 2012? I think they had come the 21 previous year.
- 22 Q. Yeah, but sort of later in the previous 23 year. And the other Services represented here,
- 24 Amazon, Pandora, Apple, and Google had no
- 25 | interactive offerings, correct?

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1 consider not only what you were substituting in, but 2 also what you were switching from?

A. That's a statement I agree with.

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- Q. So as I understand your testimony, in 5 trying to establish this rate of substitution, you 6 need to know whether a consumer of interactive 7 streaming used to listen to CDs or radio or perhaps 8 nothing at all before you can calculate a 9 substitution ratio; is that correct?
- 10 A. Well, what you need to know is how the --11 you don't actually need to know the basis -- you 12 need to know what the change is in those different 13 formats, the different forms of music consumption, 14 you need to know how those changed.
- 15 Q. So you are basically agreeing with my 16 question, correct?
- 17 A. Subject to -- I will agree with you in 18 the broad level of English. In terms of 19 technically, I don't think I am, but, yes, in the 20 broad English usage, I will agree with you.
- 21 Q. I don't speak technical. I only speak 22 English.
- 23 In other words, if aggregate revenues of 24 CDs and PDDs go down and aggregate revenues of 25 streaming go by up the same amount, you can't say

- 1: A. When you represented here, you mean in 2 this proceeding?
- 3 | | Q. | Yes. | | | |
- A. When you are saying they had no 5 representatives at --
- Q. No, I'm sorry. Let me do it again. 6
 - A. Okav.
- Q. | What I was saying was that these
- 9 interactive services who are represented in this
- 10 proceeding, Amazon, Pandora, Apple, and Google, they
- 11 had no interactive offerings at the time of the 2012
- 12 settlement, correct? Say, Spotify, we understand 13 with Spotify.
- 14 A. No, I understand. I am trying to think 15 again with being multi-service companies, but I 16 don't think so.
- 17 Q. Okay. Now, when you talk about the 18 structure of the royalty you note that the judges in 19 Web IV rejected calls to adopt a percentage of
- 20 revenue structure, and you cite Web IV in footnote 21 121 of your report as follows: Do we have a slide
- 22 with this? "Percent of revenue rate would create
- 23 undertainty and controversy regarding the definition
- 24 | and allocation of revenue."
 - That's from your report, right?

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A.	That's	correct.	

- And, in fact, in Web IV the Court adopted 2 a royalty for non-interactive streaming on a 3 per-play basis, not on a percent-of-revenue basis, correct?
 - That is correct. Α.

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Q.

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- And that solution and rationale accorded 7 in Web IV, could also be applied here, couldn't it? 8
 - A. Actually if it is feasible, yes, I believe it is.
 - Okay. But you don't adopt that analysis, Q. you don't follow that analysis and the concerns expressed by the CRB in Web IV because, as you say, the situation here is markedly different in critical respects, correct?
 - Α. That's correct.
- Q. And you say that the key difference is 18 that there exists an industry-wide settlement whose signature has been successfully adopted by the industry participants, correct?
- A. I didn't see where I said that, but, 22 yeah, I agree with those words. I said those words.
- Q. You said those words. And you didn't say 24 anything else, you said that's the key difference, 25 correct?

- A. Again, if we're going to parse words, I said it was perhaps the key factor. Clearly I thought it was an important one, but I didn't think it was the only one.
- Q. Right. But you thought it was the most important one, otherwise presumably you would have put the others in the paragraph, correct?
- A. Not necessarily because it depends on the exposition. Look, I think the sentence stands for 9 itself. I said perhaps it is the key difference and 10 it is the one I identified first.
 - Okay. I agree with that.

So let's look at successful adoption. Now, obviously the Copyright Owners are not in 14 agreement with continuing the settlement, correct?

- That's my understanding of why we're A. here, yes.
 - Q. So in that sense it has --
- Α. Actually, I should take that back. It is actually not true because we're here. You actually might think it is good, as a logical matter, Copyright Owners might love it and the problem is the Services, but my understanding is the Copyright Owners are not happy with the 2012 settlement.
 - Q. Do you have any information to suggest

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A. Actually, if you are going to parse the

exact words, could you point to where in your --Sure.

Q.

MR. HARRIS: 81.

BY MR. JANOWITZ:

Q. So let's look at paragraph 81 of your written direct report. First you identify the decision in Web IV at the beginning. Then you say, "The situation in the present proceeding is markedly 10 different in critical respects."

Then you say, "perhaps the key difference 11 12 is that there exists an industry-wide settlement 13 whose structure has been successfully adopted by 14 industry participants." Correct?

- A.
- 16 You don't say any other reason that you Q. should draw a distinction between what was done in 17 Web IV and in this proceeding, correct?
 - That's incorrect. A.
- Okay. Show me where you say something 20 21 else.
 - Paragraph or footnote 125. Α.
- 23 Okay. But obviously you made the 24 determination that what you said in paragraph 81 was 25 the key factor, correct?

1 that the Copyright Owners love it?

- A. No, that's what I just said but as a 3 logical matter, we could have been in, even if you did, but the fact is you don't, as I understand.
 - But here reality trumps logic, correct?
 - A. Actually I don't agree with that statement, but they are both relevant.
 - Q. By "here" I mean Washington, D.C.
 - The reality in Washington are completely in line with each other. But they are both consistent with each other.
- Q. Now, I notice -- let's go back to 13 paragraphs 81 and 82. Practically in the next sentence after you explain how successfully this structure has been adopted, you go to paragraph 82 and you say, "There are, however, revenue 17 measurement issues that arise in the present proceeding." Correct? 18
 - A. Modular the tone, yes, correct.
 - So that you are observing that all is not completely well with this rate structure, correct?
 - A. Yes.
- 23 In Web IV, the issue came up -- well it 24 was decided that revenue-based royalties are not suitable. Correct?

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A. I am just -- if we're going to talk about this, I want to be a little more precise and perhaps more precise than I was in the report.

My understanding is that the issue in Web 5 IV actually was adding a percentage of revenue prong 6 to the per-play one. So it wasn't a question -sometimes my report sounds like -- it wasn't just you have percentage versus per play.

- Q. I understand. I get that.
- 10 So I understand the decision is that the 11 judges decided not to add a percentage-of-revenue 12 prong.
- 13 Q. Right. And what you acknowledge in 14 paragraph 82 is that there are measurement issues, 15 correct?
 - Α.

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- 17 Q. And in Web IV, the question of 18 measurement issues came up too, didn't it?
- That's right. I raised the issue, as did 20 others.
- 21 Okay. So it was an issue there; it is an 0. 22 issue here.
- 23 Now, you go over the circumstances under 24 which measurement issues might appear, correct?
 - A. Yes.

JUDGE STRICKLER: I don't want to lose this point. You just pointed out that in the 2012 settlement, some of the subpart -- some of the rates: 4 in Subparts B and C are bundles, mixed bundles, what have you. And has the nature of the bundle, the various bundles that exist in the marketplace given the entry of Amazon, Google, Apple, and to some extent the way Spotify has changed, according to the

- 10 evidence in this case, given you pause and made you 11 think that we have new and different bundles and new
- 12 and different aggregations into ecosystems, the 13 things you are talking about in paragraph 82, that
- 14 would require us to have, if we were going to go
- 15 along with the structure of Subparts B and C, that 16 we would need to have new categories of bundles to
- 17 reflect the changing bundles from 2012 to the 18 present?

19 THE WITNESS: So a couple of things on 20 that. There are -- we do see streaming services

21 being bundled with other service or as you saying 22 being part of ecosystems in a way that I don't think

23 we saw then. I think they are more standalone

24 services.

And then that does raise issues for

Q. And in paragraph 82, you talk about a 2 situation where a service is operated at least in part to generate other economic benefits for the parent company, for example, to foster broader and deeper relationships with customers that facilitate the profitable sales of other goods and services or incorporates non-music offerings to a significant

8 degree.

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Correct?

- Yes, that's correct.
- 11 And do you see that issue arising in this 12 proceeding with these parties?
 - A. Yes.
- 14 And the second issue you identify is when 15 the service is sold as a part of a larger bundle of 16 services, correct?
- 17 A. Yes.
- 18 Q. And do you see that issue arising in this 19 proceeding with these participants?
- A. Yes. And, in fact, I think that is an 21 issue that came up -- I mean, it is inherent 22 actually in the structure of the 2012 settlement too 23 because some of those services there even are parts
- 24 of bundles that it is explicitly addressing. So 25 yes.

1 thinking about how to do the minimum. Thinking

- 2 about it off the top of my head, I would not think 3 that that would call necessarily for having -- well,
- 4 I wouldn't try to have the same sorts of definitions
- of bundles and products that you see in B and C $^{-1}$
- 6 because I think there is too many different ways it
- could happen, but I could imagine having some sort
- 8 of more generic treatment of a minimum but taking it
- 9 into account.

10 Now, in my own analysis what I did was 11 the say, well, the structure we have, from what I

12 can see of industry performance is working, but one

13 could in principle do an analysis of saying well, do we want to have another term for handling that with 15 a different set of minimums.

16 JUDGE STRICKLER: But as you understand 17 it, the proposal by Pandora does not create any new 18 types of bundles in Subparts B or C, it is

19 maintaining the same bundles that existed back in 20 2012?

21 THE WITNESS: That's correct. That is my 22 understanding of what Pandora has proposed.

23 U JUDGE STRICKBER: Is it also your 24 understanding that none of the Services have

25 proposed -- I guess we excluded -- well, I am not

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1 going to say that.
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That none of the other Services have proposed any changes to subpart -- bundles within Subparts B and C in terms of the definition of what constitutes a bundle?

THE WITNESS: As far as I'm aware they haven't. I may be missing something, since my focus really was on the 2012 settlement and whether that structure would be reasonable, but I am not aware of anybody having proposed different bundles.

JUDGE STRICKLER: And you think that the 12 rates are still appropriate to use within the existing bundles, notwithstanding the new entrants 14 who have ecosystem value and ecosystem concerns and bundling of the devices together with streaming in ways that did not exist back in 2012?

THE WITNESS: So, yeah, what I have concluded is that looking at how the industry has performed under the 2012 settlement, that within the bounds of the ability to judge these things, that the industry is performing satisfactory under it and it is meeting the statutory objectives.

23 Now, that doesn't mean you couldn't, 24 somebody couldn't come in, add something else onto 25 it, but I haven't analyzed that. I just asked take

THE WITNESS: No, I am not saying that -well, you are right, you have to assess what you think is an appropriate minimum to capture it. And if what you are saying is we have no way of measuring at all or having any sense of the revenues, then I would be concerned.

And, look, as I said in Web IV, I 7 expressed concern about measuring revenues. And it 8 is a hard problem, but the industry seems to have 9 concluded that they can solve it. It is also not just in the 2012 settlement. We also see it in the contracts with the record companies.

JUDGE STRICKLER: Well, they certainly 14 proceeded under the 2012 settlement because that is the settlement they entered into and they are 15 duty-bound to do that. But isn't one of the points of this proceeding is the Copyright Owners are 17 18 saying: Wait a minute, we think there is revenue 19 here. It is supposed to be in the revenue base. 20 And you do a percentage of revenue-based calculation, and, therefore, that revenue-based formula, that game is not worth the candle because 23

we can't figure out easily how revenue is being disquised.

So even in a perfect world if the revenue

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1 the package we have, does it appear to be working, and concluded it does.

JUDGE STRICKLER: When you say it is working satisfactorily, if the evidence were to show, if the evidence were to show that one or more Services were able to conceal or disquise or shift revenue in such a way that revenue that might arguably otherwise be appropriately viewed within the revenue base is not within the revenue base, would you still say the market is working appropriately under the 2012 settlement? THE WITNESS: That's where I would say

13 that -- what it would say is you wanted to make sure that the minimum -- the minimums are set at a level then that captures the amount they are paid because given the measurement problems.

JUDGE STRICKLER: But isn't that a moving 18 target? If you don't know how much revenue is being 19 disguised or improperly attributed to another 20 category, you don't know where to put that minimum until you know how much revenue is being improperly 21 attributed outside of the royalty base, right?

22 23 So how could you possibly use the minimum 24 to be able to figure out how to cure a problem when you don't know the dimensions of the problem?

1 base arguably, arguendo, was the right way to go, if 2 you have got a measurement problem that is 3 insuperable, do you have to, therefore, default back to a per-play rate simply because you can't calculate revenue well?

THE WITNESS: So I guess what is implicit in my approach, I should say it explicitly is whatever the measurement issues are, if you look at what has happened with the streaming industry and also with the continued production of musical works, 10 11 that it suggests that the actual amounts being 12 collected and paid are leading to satisfactory 13 industry performance.

And so it is not saying -- so the approach I am taking is not saying that this is what you are supposed to be getting, this amount of revenue for sure or this percentage.

It is asking given how the system is working and the actual amounts being paid, does the industry seem to be performing satisfactorily? JUDGE STRICKLER: It takes me back to an

expression, somebody used, I don't remember if it was you or your counsel said a Panglossian type of thing, you are saying we're living in the best of all possible worlds anyway, everybody is getting --

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1 the Services are paying revenue that they can live

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2 with and the Copyright Owners are getting revenue
 3 they can live with, so even if revenue is being
 4 concealed it still works, so let's have a little
 5 imperfection in the system and we can keep on going.
              And the Copyright Owners obviously are
   saving: No, we think that's a real problem, there
   is money that is supposed to be in this royalty
 9 base, and it is not. And it is not enough to just
10 say: Well, we're all surviving. We're not getting
11 the revenue that is properly attributable, as I
12 understand their argument.
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13 And there is no good way to measure it 14 because of the complexities of the bundling and the 15 money that moves throughout the ecosystem. I 16 understand that might not necessarily be Pandora's 17 concern, but it is the concern as it relates to

18 other, particularly, other Services? 19 THE WITNESS: But I would separate that 20 into two parts. So one is there could be an 21 argument, arguendo that the Copyright Owners say: 22 Look, we agreed to this in 2012, we thought we were 23 going to get paid a certain way, and we didn't get 24 paid that way because people were hiding revenues, 25 left, right, and center, and we regret having

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2: concealed:-- and:I hesitate:to use:the word
 3 concealed because I am not trying to say anything
 4 pejorative -- reasonable people might even differ as
 5 to where revenues should go, but the point is that
 6 it may not be a reasonable process because the
 7 Copyright Owners don't have any good input into how
 8 they go about determining where the revenue -- that
 9 is just too hard a process, too complex a process
10 and therefore -- which is the point you made among
11 others in Web IV.
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              That's just a hard thing to do when you
13 are dealing with percentage-of-revenue rates. And
14 maybe you get to some sort of a tipping point, if
15 you will, where you say, again, this game is not
16 worth the candle, we need to go to per-play rates.
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1 | But if rates -- if royalties are

17 Don't we have to examine that and see 18 whether or not we have got a problem that we can't 19 overcome with regard to measurement? 20 | THE WITNESS: I certainly think you 21 should examine it. Again, I have reached the 22 conclusion how it comes out, but I certainly agree 23 that you should take that into account and think 24 about it and think about how the market has or has 25 not used the percentage-of-revenue rates.

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1 entered the agreement.

3 that's what they thought would happen, that's an unfortunate outcome, but I am actually asking a different question, which is given how we have gotten where we are, does it appear that it works? So if what you are saying is if in this 8 hypothetical, well, it turns out they concealed lots 9 of revenue sort, it is sort of cold blooded, but 10 what it would say is: Well, but, okay, the 11 resulting royalties rates, the ones after all the

And I would agree with that, that if

12 concealment turn out to be reasonable royalty rates. 13 And, again, I can understand the argument 14 that Copyright Owners said: Look, we don't like 15 that that's what happened, but in the end what I am 16 asking is are the effect -- the effective rates in a 17 very broad sense of the word effective, are the 18 effective royalty rates working?

19 JUDGE STRICKLER: There was something 20 circular in the way you explained that, Dr. Katz, 21 because I think you are saying as long as the rates 22 turned out to be fair, then what's the problem? But 23 you defined earlier on direct testimony that fair 24 rates are rates that are done through a fair 25 process.

JUDGE STRICKLER: Thank you.

2 BY MR. JANOWITZ:

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Q. Dr. Katz, I think we can move on from this topic. Let's talk about the mechanical floor. The one adjustment that you referred to earlier was that you want to eliminate the mechanical floor, correct?

A. Yes.

O. The mechanical-only floor.

A. Yes.

 $\ensuremath{\mathbb{Q}}$. And this is an elimination that you 11 considered to be a minimal adjustment, correct?

A. I may have used that word in my report, but it is the single adjustment. 14

O. | Would vou like to take it back?

A. It is a single adjustment.

Q. Okay. Because from the perspective of 18 the publishers, do you consider this to be minimal?

A. I think publishers care about, to 20 pushback, using Dr. Eisenach's calculation, it would 21 be something like a half a percent of their 22 revenues. So I think they care about that.

23 Q. Have you done an analysis of the impact 24 of removing the mechanical-only floor?

A. No, the number I -- well, I wouldn't call

1 it analysis. What I have done is looked at Dr. Eisenach's calculations of the effects of it. We will let Dr. Eisenach address his own 4 calculations.

You state in your report that the mechanical-only floor was considered by the Services to be a concession without economic impact because the Services perceived it as highly unlikely that the mechanical-only floor would ever get triggered.

But it has been triggered in the past, hasn't it?

- A. That's my understanding, it has been.
- Q. And going back to 2012, putting yourself in the position of the people who were negotiating, isn't that something that they should have thought about, that it would be triggered?
- A. They certainly should have thought about the possibility and tried to model it, again, if they are economically rational, yes.
- Q. And do you think they would have had any difficulty assessing whether it would be triggered?
- A. As I have said in my report, they -- I think they did not anticipate what was potentially 24 happening with fragmentation. Sorry, I should be 25 clearer, the fragmentation of the licensing and

1 to keep this 50 cent minimum or he could have said 2 floor.

So does that not reveal a preference 4 among the negotiating parties that this is what we're going to have, we don't know why it would be triggered, we don't know if it is going to be triggered, but should something happen that we can't predict, because after all we have got a five-year term, we want this in here, that's an allocation of risk that both parties were able to reveal a preference for in the context of the negotiation.

THE WITNESS: Yes, I certainly agree with 13 that. And over the term of the 2012 settlement, I mean, I think the Services have to live with, that's 14 what they agreed to, and as you are saying that's the risk they bear.

The question I am asking is going 18 forward, is this something that we want to have built in? And I am saying given what we know now, 20 and I am thinking now taking this perspective of the 21 statutory objectives, et cetera, given that we know 22 what is triggering it and that it is an increase in 23 market power that would potentially trigger it, it 24 is not saying it has been triggered yet, but it 25 would potentially trigger it going forward, that is

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1 performance rights.

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Q. But they should have, just like you say 3 the Copyright Owners should have anticipated things, 4 right?

A. No, I say -- what I say is people should attempt to anticipate them and they should form beliefs. I am not going to say that people -- you say should be right. It would be nice if they are right, but it is not like some moral fault if you 10 are not correct.

JUDGE STRICKLER: Earlier on you 12 described, as I think appropriate and common in these proceedings and economics that when you look at a real marketplace agreement, you are looking at revealed preferences.

THE WITNESS: Yes.

JUDGE STRICKLER: You used that phrase. 17 18 Why isn't the mechanical floor in the 2012 19 settlement an example of a revealed preference? In 20 other words, maybe nobody knew about the potential for fractional licensing or withdrawals from the PROs, but this is one of those sort of unknown, 23 unknowns.

It is like: Well, we don't know what 25 else could happen, but no matter what, we're going 1 something to be concerned with in that that is going against the 801(b) factors.

Now, there was some other reason that it turned out to be triggered that had nothing to do with market power, suppose somehow something happened that songwriting just got way better and that suddenly the performance royalties went up because they are getting their contribution and that 9 triggered it, then I would have a different answer. 10 I would say okay, it has triggered it, but there is a reason the rate should go up.

So it is important in my analysis that if 13 this is to happen, and again this is prospective, if it is to happen through fragmentation it would be 15 resulting in the exercise of market power. So it is not just anything that goes against the Services is 16 bad. Sometimes it is just tough luck for them. 17

JUDGE STRICKLER: And just to be clear 19 when you used the phrase "market power" in the context of fractionalization, you are talking about 20 Cournot complements, probable complementary 22 oligopoly, you are not talking about any other type 23 of market power?

24 THE WITNESS: Well, it would be the 25 Cournot complements problem and also just, related

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1 to that, the individual rights provider must have 2 and therefore would have substantial market power as 3 an individual seller, and then that feeds into 4 Cournot. So that constellation of things is what I 5 am talking about.

JUDGE STRICKLER: Thank you.

7 BY MR. JANOWITZ:

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- Q. In terms of the fragmentation and the 9 changes in the performance royalty, you point out 10 that a new U.S. PRO by the name of GMR emerged, 11 correct?
- A. Yeah, it is a new PRO that covers the 13 U.S. I think the G is for global but, yeah, there 14 is a new PRO that affects the U.S.
- 15 Q. Right. And it is not subject to rate 16 guote oversight; is that correct?
 - A. That's my understanding that it is not.
- 18 Do you know what percentage of 19 compositions used by the Services is licensed by 20 GMR?
 - A. No, I would be guessing a ballpark.
- 22 Q. Isn't it true that ASCAP, BMI, and SESAC 23 license over 95 percent of the compositions used by 24 the interactive streaming services?
 - A. Again, if you represent that number, I

- 1 Q. I can tell you that EMI partially 2 withdrew in 2011.
- A. For some reason I thought EMI had been 4 the only one, but I might be misremembering the 5 facts as I am sitting here.
- Q. Well, I am focusing on 2011 because it 6 7 was before the settlement of 2012 was entered into. 8 There are others that also withdrew in 2012, but my 9 point is that at least one of them withdrew in 2011.
- So shouldn't the Internet streaming 10 11 services have been aware of this so-called changing 12 landscape when they entered into the 2012 agreement?
- A. Yes, it is something that I would expect 14 that they would have knowledge of and would take 15 into account.
- Q. | And with considerable amount of activity 1.6 17 going on in 2012, this should have been, you know, 18 in their minds, correct?
- A. Again, I will stick to as being 20 economically rational actors, and without 21 information available, they should have taken it 22 into account.
- 23 Q. And in terms of the withdrawal by certain 24 of the publishers, there were, in fact, withdrawals, 25 correct?

1 would have no reason to doubt it. That sounds in the ballpark.

- Q. And in 2012 ASCAP and BMI were in 4 business, functioned pretty much as they function 5 today, subject to rate court oversight, correct?
- A. Yeah, at the broad level. There have 7 been a bunch of developments and interpretations and consent decree, but at a broad level they are still under the consent decrees as far as I know and 10 subject to rate court review.
- Q. Right. And there has some to'ing and 11 12 fro'ing which we will get into, but it is not really 13 that complicated.

You talk about the next fact you cite is 15 a music publishers began to threaten withdrawal from 16 the PROs, thereby further increasing the number of 17 entities from which streaming services might 18 potentially have to secure licenses. I think you 19 were just talking to Judge Strickler about that.

20 In fact, a number of the publishers did 21 partially withdraw, in other words, the digital 22 rights in 2011, didn't they?

23 A. As I said, I am not going to remember the 24 timing. I know there were partial withdrawals and 25 it stopped.

- A. You said the EMI one earlier. I can't 2 remember what the timing was, whether there were 3 other ones, but my understanding, my recollection is 4 there were partial withdrawals that then ended.
- Q. Right. We also know, don't we, that 6 there was a decision on that on whether or not they 7 could partially withdraw, given the consent decree 8 and there was a holding by Judge Cote that they q could not; isn't that correct?
- A. I may get the ones between Judge Cote and 11 Stanton backwards, but again if you represent that I 12 have no reason to doubt it.
- 13 Q. Yes. And then in May of 2015 there were, 14 that holding was affirmed by the Second Circuit, correct? | ! ! 15
- A. Again if you represent those are the 17 dates.
- 118 Q. And lastly in August of 2016, the Justice 19 Department, which was reviewing the matter, decided 20 to stand pat and leave things the way they were and 21 not to support partial withdrawal; isn't that 22 correct?
- 23 A. That date sounds right. Certainly the 24 Justice Department -- I'm sorry. I am going to mix 25 up partial withdrawals and fractional licensing.

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1 That sounds right.

- Q. Right. So the issue of the withdrawal, at least the partial withdrawal, is really at this point pretty much a non-issue, correct?
- A. Partial withdrawal as opposed to full withdrawal?
 - Q. Yes.

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- A. I think that's right. I tend to think about withdrawal generally. I don't -- I know you were saying it is simple, but my sense has been that sort of all of these things are disputed and people keep pushing on it, but it may be that the partial withdrawals have been resolved.
- Q. Well, if you have some basis for telling me that, please do, because I am not aware of it.

Now, in terms of the complete withdrawal, are you aware of any plans by any major publisher to completely withdraw from BMI and ASCAP?

- 19 A. I think you have heard testimony that publishers have talked about it or raised the issue with Pandora. You asked plans, have I seen documents or have they shared their intentions with me, the answer is no, I haven't seen documents or 24 heard their intentions.
 - Q. Have you seen anything that makes that a

1 are ASCAP writers and there are writers who are BMI 2 writers and, you know, like Romeo and Juliet, sometimes they get together, right?

- A. So my understanding is there is a lack of 5 agreement on what the history of fractional licensing is and whether it has or has not been going on for a long time and that while there are those who say it has always been fractional license, I thought other people in the industry said there hasn't been and that it is, yeah, that that's 10 11 disputed.
- So what you have to testify to today is 13 not any knowledge on this, but simply your ability to report that some people disagree on this issue; isn't that right? 15
- A. No, it is more than that. If you look in the citations, for example, the Department of 17 Justice has expressed concerns that fractional 18 licensing can do, is lead to the exercise of market power and disrupt the operation of the market.
- Q. That's theoretical, though. You don't 22 have any knowledge on this. In fact, you have 23 testified in your deposition that you don't know if 24 the situation regarding fractional licenses has 25 changed since 2012; isn't that correct?

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1 credible threat, an imminent threat at this point?

A. A credible threat for them would be, 3 yeah, I think is yes, in that they see that there 4 can be economic benefit from them. They can do it and their large enough that they're must-have, and I think there are reasons to believe that the largest publishers would be must-have.

It seems to me for them to threaten it and be credible because it could be economically rational for them to do it.

- Q. But you don't have any basis for testifying that there is actually anything at work along those lines, do you?
- A. Meaning that they have put any sort of 14 plans or actions in motion? 15 16
 - O. Correct.
 - A. I don't have a basis for that.
- 18 Q. And you have talked about fractional
- licensing is a problem as well, correct?
- A. I think that the language is something about how it can amplify the problem or can reinforce the must have nature, yes.
- Q. Right. But the fractional licensing is 24 something that has been going on for some time; 25 isn't that correct? I mean, there are writers who

I think it could well be what I said in 2 deposition because as I was just saying, there is 3 this dispute about what the history is, and I have tried to stay out of that, given that people whose full-time jobs are to argue about that don't seem to be able to agree.

What I have said, though, is the possibility of fractional licensing and there has, I 9 think, there has been the change in the sense of 10 probably Judge Stanton -- I may have gotten this backwards, or actually I may be mixing it up -- I thought had said that the consent decree was silent 13 on fractional licensing. I may be failing the memory test here. And that would be a change.

Q. In your report you state that the fragmentation in the performance rights market 16 17 threatens to increase performance rights license fees to the point that the mechanical floor is triggered, having nothing to do with the increase in the intrinsic value of the performance rights or 21 mechanical rights.

What is your understanding of the 22 23 intrinsic value of the performance or mechanical 24 rights? 25

JUDGE BARNETT: Mr. Marks?

21 then adjudicated that and brought it to a

25 trying to skip forward a little bit.

Q. Conscious of our time limitations, I am

22 proceeding.

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23 BY MR. JANOWITZ:

Docket No. 16-CRB-0003-PR

OPEN SESSION 761 759 MR. MARKS: I would ask if he is going to JUDGE BARNETT: Would this be a good time 2 quote from the report that we be given a paragraph to take a break so you could gather your thoughts? 3 citation so we can make sure quotations are MR. JANOWITZ: Thank you so much. 4 accurate, same with respect to deposition testimony. JUDGE BARNETT: You are certainly 5 JUDGE BARNETT: Thank you. 5 welcome. I realize that I raised the specter of a MR. JANOWITZ: Paragraph 94, page 69, of 6 late opening or a late arrival and left the loop 6 7 the written direct statement. 7 open. 8 8 THE WITNESS: So --I believe that what we're shooting for JUDGE BARNETT: Is there a question 9 here, assuming we're open at all, is that we will 10 pending? 10 commence tomorrow at the later of a late opening 11 BY MR. JANOWITZ: 11 plus 30 minutes or a late arrival plus 30 minutes. 12 Q. Yes. I believe the question was what is 12 That will give you time to get through what surely 13 will be a bottlemeck at the front door, if we have 13 your understanding of the intrinsic value of the 14 performance or mechanical rights? 14 any of those things going on, or 11:00 a.m., which I A. So the way I am using the term here is 15 understand Mr. Marks is when your witness -- is it 16 just to say, and I am looking at it, I should 16 Mr. McCarthy? 17 probably not have used the word intrinsic, given 117 MR. MARKS: No, Mr. Herring. 18 its -- it turns out to be, I guess, a loaded term in 18 JUDGE BARNETT: Oh, Mr. Herring, can be 19 these proceedings, but what I meant by it here is 19 available. Let me ask, is Mr. Herring coming from 20 that it is not that the music is becoming more 20 New York? 21 valuable because somehow it has gotten improved or MR. MARKS: He is not. He is coming from 21 22 there is a greater contribution being made by 22 California, but we expect that he will be here. 23 Copyright Owners, but instead, rather than it is the 23 JUDGE BARNETT: California, okay. 24 value going up, it is the ability to extract surplus In the event there is some holdup with 25 that is going up through the exercise of market 25 his flight or his availability, would there be 762 760 1 another witness who would be available if we 1 power. Q. And how do you know that this value, 2 convened tomorrow afternoon or shall we just call it 3 whether you call it intrinsic or not, has not been 3 a day? I think, Mr. Steinthal, did you say you artificially depressed by the prior agreement and 4 might have a witness? 5 the regulation? MR. STEINTHAL: We have Mr. Joyce, who is JUDGE STRICKLER: Which regulation are 6 here today. Hopefully he will get on today, but I 7 you referring to? 7 don't know the answer to that question. JUDGE BARNETT: Okay. All right. Why 8 MR. JANOWITZ: 115. 9 don't you discuss and we will do the same, and we 9 JUDGE STRICKLER: The regulation that 10 sprung from the agreement? 10 will take a 15-minute recess starting now. 11 MR. JANOWITZ: Exactly. (A recess was taken at 2:53 p.m., after which 12 THE WITNESS: So I guess implicit in what 12 the hearing resumed at 3:13 p.m.) 13 I am doing is taking -- let's see, artificially 13 JUDGE BARNETT: I apologize for 14 expressed. It comes back to looking at industry 14 obsessing. There is no way for you to communicate 15 performance and to what the standards are that are 15 with us if we're having a late arrival and we have 16 no witness. 16 applied to -- if it is Section 115, so what the 17 backstop was that the parties had when negotiating So when you figure out if we will have a 18 the agreement, and if they felt, if one side felt 18 witness, if we are open tomorrow, if you will send 19 that it had been suppressed and was below levels 19 an e-mail to the CRB e-mail account, then we can 20 that would satisfy the statute, and they could have 20 reach -- we can get the information that way.

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MR. MARKS: I believe that Mr. Herring

22 will have landed in the Washington area before the

23 close of court today, so we should know whether, if

24 this turns out to be a rainstorm, that we would have

25 a witness available to go on by late morning.

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              JUDGE BARNETT: Great. Thank you.
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              Mr. Janowitz, would you like to continue?
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              MR. JANOWITZ: Your Honor, this was a
    productive intermission. We're finished with this
   witness.
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               JUDGE BARNETT: Oh, excellent.
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              MR. JANOWITZ: Thank you.
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              MR. MARKS: I'm sorry, I missed that.
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               JUDGE BARNETT: He has no further
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    questions.
              Redirect, Mr. Marks? I will ask,
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    although I have instructed you to let me know, any
    other questions from other participants? Okay.
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                REDIRECT EXAMINATION
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   BY MR. MARKS:
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          Q.
              Good afternoon, Dr. Katz.
              Good afternoon.
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          A.
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              Do you recall during your
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    cross-examination that Mr. Janowitz was focused on
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    the key difference language in paragraph 81 of your
    written direct report?
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              If that's the paragraph that is talking
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          A.
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    about differences between Web IV and the current
    proceeding, yes.
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             But let me just turn your attention here
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1 have evidence that the -- sorry, we have evidence 2 that the licensees have continued to innovate under the revenue-based royalties, which is a difference from Web IV, because in Web IV we didn't have revenue-based royalties in place, so there was a question of what would happen if they were to be brought into place.

Q. I am going to try to ask the next series of questions in a way that we can stay in open court. If it turns out we need to close it, I obviously want to be sensitive to that.

So let me ask a yes-or-no question for the moment to try to avoid clearing the courtroom. Putting aside direct licenses between interactive streaming services, on the one hand, and music publishers on the other for mechanical rights, are you aware of any other agreements involving interactive streaming that use a percentage of revenue as either the sole metric or the primary metric on which interactive streaming services pay for content?

A. Holding aside agreements between publishers and the Services, it is my understanding that that's a prominent feature or the binding prong

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1 to, to page 60 of your written direct testimony. JUDGE STRICKLER: Which paragraph is

3 this? MR. MARKS: I am reorienting the witness, paragraph 81 on page 60 of the -- of Professor

Katz's written direct testimony. 6 7

BY MR. MARKS:

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- Q. You recall that's the sentence that says perhaps the key difference that was the subject of some testimony during your cross-examination?
 - Α.
- And do you also recall discussing with 12 13 Mr. Janowitz footnote 125 with some additional differences?
 - A. Well, I pointed him to it, yes.
 - Could I point your attention to paragraph 84 of your written direct testimony and just ask if you discussed other differences between Web IV and the current proceeding in that paragraph?
- A. I think the other differences, if I am 21 reading it correctly, the other differences I talk 22 about are the ones that are cited in footnote 125, 23 in addition to the text bringing out the different 24 -- I'm sorry, it is a different one, yes.

It also brings up the point about that we

Q. Let's do this as yes or no, so there are no problems.

Sorry, ask your question -- I knew as soon as you said that you were going to ask me a yes-or-no question, that doesn't work with me. I'm sorry, ask the question again.

- Are you aware of other agreements outside the context of the mechanical right licenses between interactive streaming services and music publishers that also involve interactive streaming services paying on a percentage-of-revenue basis?
 - Α. Yes.
- Let me, so we can stay in open courtroom, Q. are some examples of that discussed in footnote 59 on page 34 of your -- I'm sorry. I apologize. That's his written rebuttal testimony, so let me ask it a different way and maybe we have to clear the courtroom for this. I apologize. I was trying to get too cute with keeping it in open session. JUDGE STRICKLER: Do you want us to clear

it now?

MR. MARKS: Yes, unless they will let me 23 point me to a paragraph in his rebuttal testimony. My only question would be to point to the reference and ask whether it addresses it.

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24 me know if I get that wrong.

OPEN SESSION 767 769 1 BY MR. MARKS: MR. JANOWITZ: Go ahead. 2 BY MR. MARKS: Q. What is your understanding of what the Q. Do you, in your binder, is there a copy 3 red boxes in the bottom right-hand corner of 4 of Pandora Trial Exhibit 886, which is titled 4 demonstrative number 4 show? 5 Corrected Written Rebuttal Testimony of Michael 5 A. It is my understanding that those are 6 streaming services entered at the dates indicated by A. I don't believe -- not -- I don't think 7 the blue lines connecting the red boxes to the 8 there is in the one that you provided. Are you 9 asking in this binder? 9 Q. Does this -- does demonstrative 4 show 10 Q. May I approach the witness? 10 any exits by interactive services from the streaming 11 A. Yeah, it is in this one. I just have the industry? 12 luxury of each attorney is asking about the other A. I don't believe so. 13 attorney's binder. So if you could point me to the Q. Are you aware of whether there have been 13 14 page. 14 any exits by interactive streaming services? 15 A. Yes, there have been. Q. Page 34, paragraph 59. 16 A. So, again, if you could remind me of the O. How did the fact of exits of interactive 116 17 question. 17 streaming services during this same time period Q. The question is does -- are those some of 18 affect your analysis? 19 the agreements to which you were referring and which A. Well, I guess, again, as it said earlier 119 20 interactive services pay on a percentage-of-revenue 20 this morning, that observed the entry and exit and 21 basis? 21 that was all consistent with a well-functioning, 22 A. Yes. 22 competitive market, that there was rivalries, and Q. Do you have an understanding of the basis 23 23 some firms are coming in because they believe they 24 on which interactive streaming services compensate 24 can succeed and other firms, either they or their 25 ASCAP or BMI for the performance rights used in 25 investors have concluded that they can't succeed. 768 770 1 interactive streaming? MR. MARKS: No further questions. A. It is my understanding that they pay a MR. JANOWITZ: Nothing else. 3 percentage of revenue. JUDGE BARNETT: May this witness be Q. If I could turn your attention to 4 excused? 5 demonstrative 4 in the slides that you were shown by 5 MR. MARKS: As far as I am concerned, 6 Mr. Janowitz. 6 yes. 7 A. I'm there. JUDGE BARNETT: Thank you, Dr. Katz. Q. If I could point your attention to the THE WITNESS: Thank you. MR. STEINTHAL: Allow me a moment to get 9 red boxes --10 JUDGE BARNETT: I'm sorry. Mr. Marks, I 10 my witness, who is standing by. 11 think we treated this as restricted, even though it 11 JUDGE BARNETT: I shall. Good afternoon. 12 is not marked as restricted. Is that correct? 12 Could you raise your right hand, please. 13 MR. JANOWITZ: I think we did, Your 13 Whereupon--14 Honor. 14 PAUL JOYCE, 15 JUDGE BARNETT: Okay. 15 having been first duly sworn, was examined and 16 MR. MARKS: That's fine. We can go into 16 testified as follows: 17 restricted session, if we need to. I don't think I 17 JUDGE BARNETT: Please be seated. 18 am going to ask questions that involves restricted DIRECT EXAMINATION 19 testimony but -- yeah, no, we won't bring it up on 19 BY MR. STEINTHAL: 20 the screen. Everyone can look along and I don't Q. Good afternoon, Mr. Joyce. 20 21 think my questions -- I will try to be sensitive to A. Good afternoon. 21 22 that. 22 Q. I'm not sure if this is on.

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A. It is.

25 the record?

Q. Can you please state your full name for

And obviously my colleagues here will let

JUDGE BARNETT: Okay, thank you.

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It is Paul Joyce. Q. Mr. Joyce, did you submit a written direct statement, testimony in this proceeding? A. I did. Please take a look at the binder that is 6 marked as Google Trial Exhibit 693 in front of you. Does that binder contain your written direct 8 testimonv? 9 A. It does. 10 And if you look at page 14, is that your Q. 11 signature?

A. It is my signature. Is your written direct testimony true and Q. correct to the best of your knowledge?

It is.

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16 MR. STEINTHAL: Google offers Exhibit 693 17 and the exhibits in the binder which are Number 553, 557, 558, 559, and 561.

19 MR. SCIBILIA: Copyright Owners have no 20 objection.

21 JUDGE BARNETT: The enumerated exhibits 22 are admitted.

(Google Exhibit Numbers 693, 553, 557, 24 558, 559 and 561 were marked and received into 25 evidence.)

1 applications.

And, in addition, the Google Play store also sells digital content, so it sells and rents movies, books, and music. And for those three 5 businesses, for movies, for music, and for books, we also offer Google Play branded applications to enjoy that media in.

So the shortest way of saying it is 9 Google Play is very well-known for apps and games for Android, but we have businesses in books, movies, and music that span platforms.

Q. Now you said you spent seven years in music, I believe. Can you bring us through what 13 your duties and responsibilities within the music offerings of Google have been?

A. Sure. For almost all that time I was the lead or head product manager. So at first I was the only product manager and then built out a team of other product managers.

And at Google product managers are generally responsible for defining a product, for 22 its direction, for figuring out what features are 23 there. We work very closely with engineering 24 counterparts to get them built.

And then we work cross-functionally with

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1 other disciplines, you know, to support those

3 business.

BY MR. STEINTHAL: Q. Mr. Joyce, where do you work?

MR. STEINTHAL: Thank you.

A. I work for Google.

And what is your position at Google?

A. I am a director of product management.

Why don't you just bring us through your Q. career at Google from the beginning until now.

Sure. I came to Google actually seven years ago today as part of an acquisition. I was at a small software company called Simplify Media that Google purchased. 12

And for almost all of last seven years I 14 have worked on music. And then for the last two years and a few months, I have also worked on our books and movies product. And then for the last few weeks, I have been working on a new games initiative.

Can you explain the difference between 20 Google Play and Google Play Music for the benefit of 21 the panel?

A. Sure. The Google Play is probably best 22 23 known for being the app store for the Android platform. If you had an Android device, it is where 25 you would go to get your games, get your

2 products in the marketplace and to develop the

Okay. Can you describe the Google Play Q. Music offering for the panel?

A. Sure. There are a number of components to Google Play Music. One is a download store, so you can buy singles and you can buy albums from us. 9 You can download them and use those files however you like, but we also keep your music for you in the cloud so that you can stream them to your devices, 12 whatever you like.

And in addition to the download store, we offer a free-to-the-user locker service, so if you have an existing music collection, you know, CDs that you purchased, downloads that you purchased from other stores, you can add those to the $\ensuremath{\operatorname{Google}}$ cloud and similarly stream them on your devices.

And, in addition to the sort of those two 20 parts of the service, in the United States and Canada we have a free-to-the-user radio product. So 21 it is a non-interactive service. 22

Generally you would start a radio station 23 24 by selecting a seed, like an artist you would want 25 to hear. And then we would serve a stream, a radio

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1 station based on that artist, but subject to the 2 performance compliment in terms of how many songs 3 from an artist or an album you might hear.

And then finally if you want something 5 more interactive, where you get to pick the music 6 you want to play, we offer a \$9.99 a month 7 subscription service.

Q. Now just in a little bit more detail, 9 what features did the locker service offering and 10 the radio service offering provide to users of 11 Google Play Music?

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A. Sure. So the main benefit of the locker 13 service is that you can listen to your purchased 14 music with more convenience than if you had to 15 physically transfer the files to your various 16 devices.

So you go through a process where once 18 you either upload the files, so depending on rights, 19 you might not actually have to upload them, and then 20 you can access them from your phone, your tablet, 21 from the web.

22 With free radio, you know, I think the 23 key feature is helping you find music to sort of 24 match your mood or your activity. You can start 25 with, as I mentioned, an artist, for example, as a 1 that be part of your experience.

2 So I think one access of differentiation 3 is the completeness of the service. Similarly,

4 along with the locker, you have an add your

5 collection to, I think a second thing where we

6 focused a lot is in the quality of recommendations

7 we provide. 8 : : 8 So, you know, if you like a certain

9 artist, the suggestions of other artists you might 10 want to listen to or around the stations and

11 playlists we create automatically, I think we want

12 to make sure we have the best music for hanging out 13 with your friends, the best music for driving to

14 work, and the greatest understanding of when those

15 recommendations might be appropriate for you. 16 So we have invested a lot in

17 understanding context and understanding what music goes with that context.

119 Q. Does Google seek to convert the users of 20 the three tier services, the locker, and the radio 21 to become paid subscribers?

22 A. Absolutely. In fact, that's the primary 23 reason we started the radio service, but, you know, 24 while we're always happy to have people who use our 25 product, the people we like best are people who pay

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1 seed or a genre, like I would like to listen to some 2 blues radio, but a feature we have added to our 3 radio product and our subscription product is to try 4 and take your context a little more into account.

5 So you could select something like music 6 for working out, and music in a genre you like but 7 that helps get you pumped and ripped would play or 8 music for relaxing when you are at home would be 9 something a little more mellow, although some people 10 think metal is mellow. It depends on taste.

- Q. Let me ask you this: How does Google 12 Play Music seek to differentiate itself from other 13 digital music subscription service offerings in the 14 marketplace?
- A. It is something we think a lot about 16 because the marketplace is crowded. And it is not 17 always easy to stand out. I think that we have 18 sought to differentiate ourselves in a couple ways.

First, by providing a complete offering 20 of services, so as I mentioned we also offer a 21 download store. So if you are a subscriber, 22 unfortunately not everything is always in window. 23 Sometimes there are holdbacks. If there is music 24 you want to listen to, you can buy it and it is not

25 part of subscription, you can always buy it and have

1 us for the subscription service.

2 So we put up a few roadblocks for free 3 users to help encourage them, once they understand

4 | the service better to subscribe. Examples of those

5 roadblocks would be we have advertising to support 6 the radio service, so there is pre-rolled video that

7 appears before you start stations. There are

8 interstitial audio ads that appear during the

9 station. There is one example.

10: We also have teasers of the free service

11 or, I'm sorry, teasers for the paid service that 12 appear when you are using the free tier. For

13 example, we have a tab of top charts. And you can

14 see the top chart but you can't actually play an

15 individual song. We tell you that that's a feature 16 you would have to pay for.

17 Similarly, you know, a big component of 18 the paid service is that you can take music

19 off-line, so you can have music downloaded to your

20 device, so if you don't have an Internet connection,

21 maybe you are out camping in the woods or riding the 22 metro into work and the cell phone coverage isn't

23 good enough to support streaming, we offer you the

24 ability to take it off-line. And that is not

25 available at the free level. And that's one of the

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question.

1 up-sells we use like take music off-line? Start a free trial and subscribe.

Q. Now, in paragraph 9, you make reference to a family plan offering. How does that work?

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- A. So the family plan is one of my favorite features. For \$14.99 a month, you can subscribe with your family up to six people in a household together. So you get, you know, so you get the same advantages you would have as individuals but the family gets to participate together.
- Q. Has that become a valuable component of 12 the Google Play offering?
- A. It has. And as part of offering it, we 14 have noticed a few things. It has been greatly helpful for increasing the overall number of 16 subscribers.

And the reasons for that are twofold. 18 One thing that we find is that when people start a 19 free trial as a family compared to an individual, 20 they convert at a higher rate than individuals do. So if you start a free trial, you are more likely to 22 end up paying us after your trial.

Secondly, one of the things we have 24 observed is that once you are paying us, you are 25 much less likely to churn as a family than you are THE WITNESS: Or section 11.

MR. STEINTHAL: Paragraphs 11 and 12 2 speak to the investments that $\ensuremath{\mathsf{Google}}$ has made in Google Play Music.

> JUDGE BARNETT: Overruled, Mr. Scibilia. MR. SCIBILIA: Thank you, Your Honor. JUDGE BARNETT: You may answer the

9 THE WITNESS: Thank you. So the people, engineers, product managers, we have music 10 merchandisers, so there we rely on computers to 12 build great radio stations, but we also rely on people too. 13

So we have both full-time employees and 14 contractors who decide what is amazing music for 15 16 pre-gaming with your friends or when it is raining outside. I guess tonight I will find out if we have a "when it is snowing outside" situation. 18 19

Beyond them we have customer support 20 people. We have licensing people. We have people 21 who deal with partnerships. So we have people.

And I think a second investment was our 23 acquisition of Songza, which completed in July of 24 2014. And then a third type of investment is 25 investment in marketing the service, which is many,

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1 as an individual. So that people stay -- families 2 stay subscribed much longer.

And I think one of the things that has been most surprising to us is that when you add people to your family, the people you add tend to be brand new to Google Play Music.

- Q. One last topic. What investments has Google made in the Google Play Music service offering in the years that you have been involved with music?
- A. So we have made a number of investments 12 across different dimensions. I think one of them is people. So there are more than 100 engineers who 14 work just on this product. There are product managers like me.
 - And many of them are there now? 0.

MR. SCIBILIA: I am just going to object. 19 I am going to object, this is beyond the scope of 20 the witness' written direct testimony. He doesn't 21 talk in his witness statement at all about 22 investments made by Google in people or otherwise.

JUDGE BARNETT: Mr. Steinthal? THE WITNESS: Paragraph 11? MR. STEINTHAL: Yes, thank you. 1 many millions of dollars. 2 BY MR. STEINTHAL:

- Q. And how is the acquisition of Songza an 3 4 investment in Google Play Music?
- A. So we, from a product standpoint, we 5 decided that one of the ways we wanted to differentiate was by making it as easy as possible to pick the right music, to do that in as few clicks as possible, without really having to think and to 10 lean in more to this idea that your activity or context is really important. 11

Songza had a product in the marketplace 13 that were starting to do that. And we met the people, we thought they were great people, and we thought that by adding them to Google Play Music that we could help achieve our vision faster.

So they have become an integral part of the team. It was, I think, a very successful 18 integration. And we have really, you know, since then continued to invest in this idea that context is really important, I think culminating with a refresh we did of the product that we released at the end of November, it was very, very focused on context.

MR. STEINTHAL: I have nothing further.

25

12

25 site, it also includes music-related content,

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	mll			
	Thank you.		correct?	
2	CROSS-EXAMINATION	2	A. Correct, that is my testimony.	
3	BY MR. SCIBILIA:	3	Q. And then you go on to discuss YouTube	
4	Q. Good afternoon, Mr. Joyce.	4	Red, stating that YouTube Red subscriptions are	1
5	A. Good afternoon.	5	bundled with Google Play Music subscriptions, right?	!
6	Q. Happy Google anniversary.	6	A. Correct.	
7	A. Thank you. I get a free massage today.	7	Q. And then in paragraph 14 you state that	
8	Q. So I would like to direct your attention	8	YouTube operates a free mobile app called YouTube	:
9	again to your written direct testimony, which has	9	Music, right?	
10	been marked as Google Trial Exhibit 693.	10	A. Correct.	
11	And as director of product management at	11	Q. And that app allows users to access	
12	Google Play, you are very familiar with Google's	12	music-related video content from the YouTube	
13	music-related services, correct?	13	catalogue, right?	;
14	A. Yes.	14	A. Correct.	
15	Q. And in section 1 of your statement,	15	Q. And subscribers to YouTube Red not only	
16	beginning on page 3, you provide an overview of	16	receive this content free of advertisements, they	1
17	Google's, I am going to quote you here, "Google's	17	also get the ability to switch the applinto what you	1
18	music-related services and revenue streams,"	18	call an audio-only mode, correct?	
19	correct?	19	A. That's right.	
20	A. Yes, that's how the testimony starts.	20	Q. And this allows the user to listen to the	
21	Q. And the first Google music-related	21	audio in YouTube's music-related video content	
22	service you discuss is Google Play Music, right?	22	without watching the video content, right?	
23	A. Correct.	23	A. Yes.	
24	Q. And as you discussed in your direct	24	Q. And now one of the features you say, and	
25	testimony just now, Google Play Music is a streaming		I believe you talked about it in your direct, that	
				706
	,	84		786
1	music and a locker service, right?	1	you say differentiates Google Play Music from other	1
2	A. As well as a subscription service.	2	services is its use of human playlist creation,	
3	Q. Okay. Right. And it is a subscription	3	correct?	
4	streaming service and a locker service, correct?	4	A. That is correct, although other services	
5	A. Yes.	5	also use human some do; some don't, but yes.	
6	Q. And you have the Google Play Music	6	Q. And what services use human playlist	
7	streaming service has two tiers, a free tier and a	7	creation?	
8	subscription tier, right?	8	A. From memory, I believe Apple at launch	
9	A. That is correct.	1 -	made a big deal of humans creating playlists as part	1
10	Q. And the free tier consists of the locker	10	of Apple's music service.	
11	service and a Section 114 compliant non-interactive	11	Q. Do you know whether Spotify uses humans	
12	streaming radio service, right?	12	to create playlists?	
13	A. Yes.	13	A. I don't.	
14	Q. Okay. And the next Google music-related	14	Q. Now, let's turn to the second subject of	
15	services you discuss in your written direct	15	your testimony, which is the impact of music	
16	testimony are what you refer to as the YouTube	16	royalties on Google Play Music's ability to obtain	
17	offerings, correct?	17	profitability.	
18	A. Correct.	18		
19	Q. The YouTube offerings?	19	And that starts at, you refer to that at paragraph 3 at page 2, the paragraph.	
20	A. Correct, yes.	20	MR. STEINTHAL: If we're going to go into	
21	Q. And you state in paragraph 13 of your	21	anything confidential, we're going to need to go	
22	statement that Google operates the well-known video	22	off.	
23	streaming site YouTube, which can also be viewed as	23	MR. SCIBILIA: I get it. We're close but	
24	a mobile app, though YouTube is a streaming video	24	not there yet.	
25		25	THE WITHNESS. I'm corru where are you?	1

25

THE WITNESS: I'm sorry, where are you?

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                                                                                                                  836
                                                            1
                                                                                      CERTIFICATE
 1 BY MR. SCIBILIA:
                                                            2
         Q. Paragraph 3 at page 2, there is a second
                                                            3
                                                                   I certify that the foregoing is a true and
 3 topic you refer to there, topic second.
                                                               accurate transcript, to the best of my skill and
              JUDGE STRICKLER: Page number?
                                                               ability, from my stenographic notes of this
5
              MR. SCIBILIA: Page 2.
                                                               proceeding.
6
              THE WITNESS: Oh, yes, I say second, I
7 will discuss the impact of music royalties.
                                                            8
   BY MR. SCIBILIA:
8
                                                            9
                                                               3/14/17
                                                                          Karen Brynteson
9
         Q. Correct, okay. And you testified --
                                                               Date
                                                                          Signature of the Court Reporter
   okay. I think now maybe is the time to clear the
                                                           11
   room. Sorry.
11
                                                           12
12
              JUDGE BARNETT: Anyone in the courtroom
                                                           13
13 who is not privy to the privileged and confidential
                                                           14
14 information available in this case, please wait
                                                           15
                                                           16
16
               (Whereupon, the trial proceeded in
                                                           17
17 confidential session.)
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